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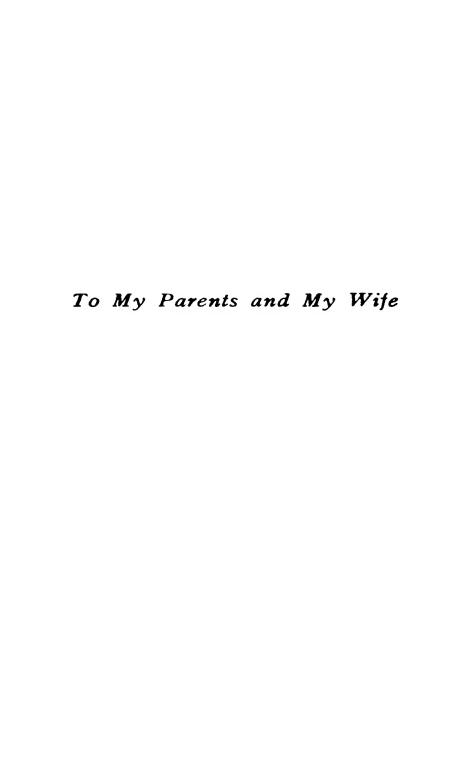
Towards a better understanding of Sexual Relationship

BY

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The diagrams and illustrations referred to in the text of this work will be found in a sealed section at the end of the book. The section is sealed because it is not intended that the illustrations should be suitable for display. They are of interest only to the serious reader. The section is bound at the end of the book to allow for its removal without damage to the book itself should the reader so desire.

FOREWORD

Many authors of books that are meant to be of use to the public start their books with an excuse for having them published at all. The author of this work would like to explain, rather than excuse, the appearance of a book which he thinks fills a need, and fervently hopes will be of real service to most of its readers.

There are several publications which treat in full the subject-matter of one, or perhaps two, of the chapters of this book, and lightly skip the contents of the other chapters.

But, except for one other work of an encyclopædic nature, there is a sad lack of books which in one volume present the different aspects of the problem of sexual relationship in the world of to-day.

No chapter in this book is complete without the other chapters. Never can contraception be rationally applied without a rudimentary knowledge of the Anatomy and Physiology of the Sex Organs of both Man and Woman, and of the progress of the Sex Act. So, too, the problem of Venereal Disease, for instance, is closely related with that of Prostitution, which in turn revolves on Psychology and the influence of Economic Conditions.

So this book has not been written to be read hastily behind locked doors, or even for the more serious reader who hopes to have his own special problem solved by reading just one part of the book; but it has rather been written to correlate, in a way the layman will understand, the knowledge that has been acquired by scientists and medical men working in the field of sexology. The book is an introduction to what the author thinks the man and woman of to-day should know about their Sex Life, and it will have served its purpose if the reader supplements the knowledge he may gain with this one lesson:

There is a specialist within easy reach to deal with your problem, no matter what it may be. This book indicates in each instance where to find that specialist. If you cannot solve your problem—go to him.

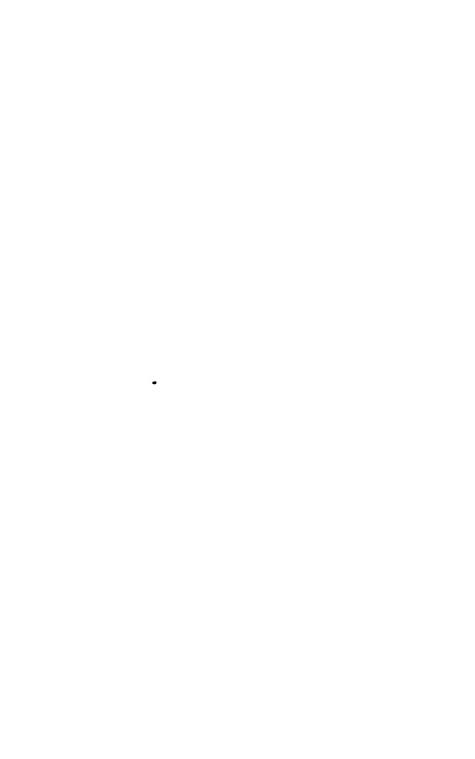
One last word as to the qualifications of the writer to produce this work. The author is a young medical man specialising in the study of Obstetrics and Gynæcology, who has worked at his subject in England, America and Switzerland. Where he has given information, therefore, it has not always been derived from English sources. This is mentioned to explain a possible divergence in some of the facts as given by other writers, and in some of the figures given in English publications. It would add unnecessarily

to the bulk of the book and detract from its simplicity if sources were cited throughout.

All medical or scientific terms used are explained in the Glossary.

I gratefully thank the artist for the exceedingly competent way in which he has reproduced the drawings and diagrams in this book.

A. H.



CHAPTER I

ANATOMY

A CERTAIN knowledge of the Anatomy of the Sex Organs is necessary for an understanding, in the first place, of their Physiology. By Anatomy is meant the study of the structure of the whole or part of the body of any animal. By Physiology is meant the study of the working of the whole or part of the body. A simple comparison might be made with a non-living thing like a toy clockwork engine.

The Anatomy of the engine would be the spring, the winder, the gears, the wheels, axles and the body which keeps the whole thing together. The Physiology would be an explanation of how the engine works—that is that someone winds the winder, which tightens up the spring, which in turn, as it is allowed to slacken, revolves the wheels.

In both man and woman the Genital Anatomy consists of the external organs which can be seen on any normal living man or woman, and the internal organs, which can only be seen by dissection or at an operation. Further, it consists in the knowledge

of the structure of what can be seen with the naked eye, and what can be appreciated only with the aid of a microscope.

Male Genital Organs

The external organs are the penis and the scrotum.

The penis hangs suspended from the front of the bony part of the male pelvis. It can be divided into three parts for the purpose of description (see Fig. 1):—

- 1. A root by which it is connected to the pelvis.
- 2. A body.
- 3. A tip.

The body of the penis contains a central canal through which urine and seminal fluid pass, and "erectile tissue" which becomes distended with blood when the organ erects (see Fig. 2).

The tip of the penis contains no erectile tissue continuous with that of the body; but at the tip the central canal covering swells out into what is known as the "glans" of the penis. The "glans" is also well supplied with blood. The skin covering the "glans" is very sensitive and it is folded over to form a "prepuce" or the "fold of the skin of the tip of the penis." It is the prepuce that is removed at the operation of circumcision.

The scrotum is a bag hanging behind the penis, and it contains the two testicles with their various coverings, blood supply and canals.

In the testicles, which are two grey bodies about the size of a chestnut, are produced the spermatozoa. (More is said about the spermatozoa in the chapter on Physiology.) The spermatozoa are carried through the canals with fluid from the various glands (the prostate, seminal vesicles and bulbourethral glands) and are probably stored for some time in the seminal vesicles. The diagram in Fig. 3 gives a simplified version of the way the spermatozoa reach the opening at the tip of the penis after leaving the testicles. For a further understanding of how the spermatozoa and the seminal fluid from the glands are ejaculated, the chapter on Physiology of the Male Genital Organs must be read.

The internal genital organs of man consist of the prostate gland, certain canals and the seminal vesicles. No more need be known, for the purposes of this book, about these organs than their relative position as shown by the diagrams, and something of their function, as explained in the chapter on Physiology. There are muscles in the various canals and in the canal leading from the bladder to the tip of the penis which hold the

canals closed so that seminal fluid cannot be mixed with urine.

Female Genital Organs (see Figs. 4, 5 and 6).

The external genital organs are the mound of Venus, the large and small lips surrounding the opening of the vagina, the hymen, which in the virgin partly closes the opening of the vagina, the clitoris, various small glands and the breasts (see Fig. 4).

The mound of Venus is a pad of fat covered by skin in front of the centre of the bony pelvis. It becomes covered by hair at puberty.

The large lips are folds of skin which enclose some fat. They pass back from the mound of venus to end about an inch in front of the anus.

The small lips, which lie inside the large lips in front, cover the clitoris and pass back to join one another behind the vaginal opening.

The two pairs of lips, together with the clitoris, are known as the vulva.

The hymen is a membrane which partially stretches over the vaginal opening, and which is torn or may be stretched at the first coitus (see Sex Act).

The clitoris is like a small penis. It, too, has a root, body and glans, which is covered by very sensitive skin. The prepuce of the

clitoris is formed by the forward parts of the small lips where they meet.

The breasts develop at puberty and are known as secondary genital organs.

The internal genital organs consist of the ovaries, the tubes, the uterus or womb, and the vagina.

The ovaries are two organs, each about the size and shape of a small walnut. They lie in the lower part of the abdomen, one on each side of the central bony spinal column. The ovaries are full of eggs, one of which ripens in each ovary after puberty on an average each alternate month. (See Fig. 6 and chapter on Physiology.)

The tubes lead from the ovaries on each side to the top angles of the uterus. They serve to transmit the eggs from the ovary to the uterus, are about four inches long, and inside have a diameter of about one-sixth of an inch. (Fig. 6.)

The uterus (Figs. 5 and 6) is a hollow muscular organ, into which the tubes open on each side, and the cavity of which opens by the neck into the vagina. Its size and position can be judged from the diagrams. It is necessary to know, in order to understand other chapters in this book (Physiology, Sex Act, Abortion, etc.), that the uterus, like all the other organs in the abdomen, such as the intestines, bladder and spleen,

is covered by a membrane—the *peritoneum*. The peritoneum is smooth and slippery, so that the organs can slide on one another in such movements as bending over. If any germs come into contact with the peritoneum, the very serious condition of peritonitis may result. Further, we know that the cavity of the uterus is lined with tissue which is continually changing and renewing itself (see Fig. 7) and which is thinnest just after the menstrual flow has stopped, and thickest just before menstruation starts (see chapter on Physiology). The *neck* of the uterus is about an inch long. It has a cavity that, in the woman who has never had a child, with difficulty admits the smallest thickness knitting needle (Fig. 6).

thickness knitting needle (Fig. 6).

The vagina (Figs. 5 and 6) commences with the cleft between the small lips, and passing upwards and backwards, reaches the neck of the uterus. The vagina is about three inches long, and in front and behind the neck of the uterus ends in a cul-de-sac. (The importance of this observation is seen

in the chapter on Abortion.)

This chapter has been a description of the size, shape and position of the organs. The next chapter is concerned with their working. It is obvious to everyone that there are further anatomical differences between man and woman than those of the sex organs alone. As a general rule the

human male is larger than the human female. The average height of a European man is a few inches more than the average height of a European woman. Height is regulated according to the size of the bones comprising the skeleton; the bones of the male limbs are longer, and incidentally considerably heavier, on an average, than those of female limbs. The length of the male spinal column is 28 inches; the female spinal column is four inches shorter. The male pelvis is longer and narrower than the female pelvis, the female requiring the broader pelvis to allow the passage of a child's head in childbirth. So right through the whole body, differences are found. A man really has more brain than his wifethe difference, as a rule, is $4\frac{1}{2}$ ozs., the man's brain weighing $48\frac{1}{2}$ ozs., the woman's only 44 ozs.

A great deal of research has been done to find out how fundamental the sex difference is. It has been proved that this difference is so fundamental that every cell in a male differs from a corresponding cell in a female in the composition of its most vital part, the "nucleus." For a further understanding of the absorbing subject of cell structure, a simple book on Zoology will provide a good starting-ground; and such a book as Gray's Anatomy, which deals more fully with the subject, is not completely beyond the under-

standing of the reader who has studied some science.

As soon as an individual has been conceived, the sex is determined (see chapter on Pregnancy and Labour). It is a well-known fact among embryologists that it is the spermatozoon that carries the factor determining the baby's sex—and not the ovum. The genital organs, however, are only recognisable at about the eighth to twelfth week after conception (see chapters on Physiology and Pregnancy and Labour).

CHAPTER II

PHYSIOLOGY

IF we think of the working of the sex organs purely biologically, we realise that the purpose of the male sex organs is to produce spermatozoa—the male element of the future child—and arrange for these spermatozoa to be placed in such a way that they can come in contact with the egg—the female element of the future child. After all, no matter what sex may do to influence our lives, its chief function is to ensure the continuation of life, and it is towards that end that Nature has brought about all the added factors which are responsible for a "sex life."

It is in the testicles that the spermatozoa are formed by a complicated process from actual cells of the testicles. A single spermatozoon consists of a head, a middle piece and a tail (Fig. 8). The spermatozoon is propelled along by virtue of the rhythmic lashing of the tail, and to such good purpose does this tail work that the spermatozoon deposited in the vagina of the female is said to be able to move a twentieth of an inch in an hour, although the whole length of a spermatozoon is only in the region of about a thousandth of an inch. The spermatozoa formed in the testis are at first not very active, but as they are carried or move along the canals from the testicle to the seminal vesicles, which have been represented in a very simplified form in Fig. 3, they become more active.

Spermatozoa, being live organisms with a power of movement of their own, have a physiology of their own, and it is the study of this physiology which is so important for the comparatively new science of chemical contraception (see Contraception). The seminal vesicles and the prostate gland, which are represented diagrammatically in Fig. 3, produce fluids which dilute the fluid containing the spermatozoa which has come from the testicles. The effect is also further to activate the spermatozoa.

What happens at sexual intercourse? We have seen that the testicles produce the spermatozoa which come later to be mixed with the fluid from the various glands and canals, and which, as a whole, is known as "semen" or seminal fluid. At intercourse, this fluid is deposited in the vagina of the female by the penis. The penis, as can be seen in Figs. 1 and 2, is an organ which can dilate with blood, and which is then adapted to fit into the vagina. In the chapter on Anatomy it was stated that the skin of the tip of the penis is well supplied

with nerves and is especially sensitive. These nerves receive stimuli which are carried to other nerves in charge of the carried to other nerves in charge of the various muscles concerned in the ejaculation. When the nerves are sufficiently stimulated, the ejaculation of the spermatozoa takes place by a series of rhythmic contractions of muscles of the penis. In the normal sex act (see Sex Act) the seminal fluid is deposited high up in the vagina, near the opening of the neck of the uterus, and the spermatozoa move up into the uterus. They then move up along the walls uterus. They then move up along the walls of the uterus till those that have survived and they are far, far fewer than the original 200,000,000 ejaculated — reach the tubes, along which they progress. In the tube, if there is an egg, one spermatozoon will probably fertilise it. The fertilisation process has been watched under the microscope with the eggs and spermatozoa of lower animals. The spermatozoon enters the egg, which is about two hundred times its size, and immediately a protective covering is formed all around the egg, preventing the entry of any further spermatozoa. The fertilised egg in normal circumstances moves down the tube to the uterus, where it may become implanted, as described in the chapter on Pregnancy and Labour.

The physiology of the female sex organs is a somewhat larger subject than that of

the male sex organs. The ovaries in the female, which are about the same size and shape as the testicles in the male. but situated inside the abdomen, fulfil a function corresponding to the function of the testicles. Whereas the testicles produce spermatozoa, the ovaries produce eggs. There are, how-ever, important differences in the way eggs and spermatozoa are produced. In the man, at the age of puberty, the cells of the testicle commence forming spermatozoa, and they work so that there are up to 200,000,000 spermatozoa ready for each ejaculation. A girl baby is, however, already born with the full complement of thousands of eggs in her two ovaries. Of these, there are about two hundred and fifty egg "cells" in each of her ovaries which will become active—enough to produce an egg each alternate month between the age of about twelve and fifty—the average possible child-bearing age. It is only at puberty that these "cells" start becoming active, and they do so, probably, one by one each alternate month in each ovary. In turn each "cell" (the term not being used according to its strictly scientific meaning) enlarges and pushes its way through to the surface of the ovary. Scientifically, this egg cell is called a follicle At the correct time, the follicle, which in growing has become filled with fluid, bursts and the egg itself is liberated to find its own

way somehow (no one yet knows exactly how) into the end of the tube leading to the womb. After the egg has been pushed out, the follicle shrinks and changes into what is known as the "yellow body." After some fourteen days or so, this yellow body becomes small and of no importance if the egg is not fertilised. If, however, the egg is fertilised and the woman becomes pregnant, the yellow body persists in its size and is of great importance (probably in preventing menstruation) till the end of the pregnancy. If the egg is not fertilised, it is passed out with the next menstrual flow.

Scientists have long known something about the physiology of the egg formation or ovulation, and of course every woman knows something about menstruation. Every woman is conscious of menstruation, but few are conscious of ovulation. It happens without the woman usually being aware of it at all. Fortunately for science, some women are conscious of ovulation. At least there are some women who have definite pains just about the middle of the interval between their periods. This is lucky for science, for it was these pains that occurred regularly between the periods that set scientific workers, not so many years ago, thinking whether there was any relationship between the pains, the periods and ovulation. In point of fact, it has been comparatively lately established that

there is a very definite relationship. Ovulation has been proved to take place about the fourteenth day after the start of the menstrual flow, and it has also been proved that menstrual flow cannot take place in the presence of a large yellow body in the ovary. A practical application of this knowledge is illustrated in the chapter on Contraception.

The Menstrual Cycle

Every normal woman starting from puberty has menstrual flow. This menstrual flow does not indicate, as many people imagine, that puberty is just starting. It indicates that the period of puberty has ended-that the girl is now a sexually-mature woman, capable sexually—though not usually prepared physically and mentally, of bearing children. The extent and amount of menstrual flow varies greatly in different women, and what one woman considers normal would be an exceedingly large and long flow for another; and, of course, the opposite situation exists. The average length of flow among women in England is from three-and-a-half to four days. However, in different countries there are great differences, and it is not at all abnormal if a woman travels to a different climate for her to miss altogether one or more periods. The flow consists of blood from the blood vessels of the womb and a mass of mucous tissue

from the womb. The normal interval between the first day of one period (or flow) and the first day of the next period is twenty-eight days. The twenty-eight days can be divided into three periods:—

- 1. Four or five days for menstrual flow (after the "yellow body" of the last period in the ovary has lost its activity).
- 2. Ten days for an *interval* of rest and re-building of tissue.
- 3. Thirteen days of growth of tissue and congestion with blood and mucus.

The main functions of the ovary have been mentioned as the production of the eggs and the control of menstruation. Now both the testes and the ovaries have many other functions as glands responsible for secretions which are said to influence our sex life. In man the testes, and in woman the ovaries, combine with other glands in the body in producing secondary sexual effects. Those visible are the obvious changes of puberty, and those less visible later are the desire for a sex life, and for all that that phrase may imply. The logical continuation from a scientific point of view of the study of the working of the sex organs is that of the Sex Act, treated in the next chapter but one, but for convenience the next chapter deals with the Psychology of Sex.

CHAPTER III

THE PSYCHOLOGY OF SEX

By definition the word psychology means "the science having for its object the investigation of the mind or consciousness." course. "sex" itself has no mind or consciousness, but when we talk of the psychology of sex, we mean a study of that part of people's minds occupied with, or influenced by, sex. At the end of the last century, Freud sprung upon a surprised and rather shocked world his theories of psychology, chief of which was that the mind is not the same as the consciousness, but is a combination of consciousness and subconsciousness. Since then. professional and amateur psychologists have been occupied trying to find the proper place of sex in this combination. For the consciousness it is easy to say that when we are thinking of something definitely sexual, sex has a place in our minds. Of course we are all psychologists, though most of us are psychologists in the same way as the man who spoke prose all his life—without knowing it! Every time we say something to someone, knowing more or less what answer to expect, we are using our psychological insight. If, on a rainy day, we say to someone: "Awful weather, isn't it?" we know by our psychological insight that the answer is almost bound to be in

agreement with our statement.

The question for psychologists is: "What place does sex have in our mental make-up?"—and no one has any real idea yet about the answer. Some of the interpreters of Freud go so far as to say that much of our mental make-up is governed by sex, while others hold that it is positively ridiculous to state that a man should say something like "Awful weather, isn't it?" because the sex element in his mind, be it conscious or subconscious, makes him say that sentence.

Sex is an instinct, just as eating or keeping warm, or sleeping when tired, are instincts. Sex is the instinct which results in the continuation of the race, and it includes such feelings as those usually termed the maternal and paternal instincts. As an instinct, sex or race preservation comes second only to self-preservation, which normally dominates all other instincts. In civilisation we curb our instincts, and they are moulded to a certain extent by our civilisation. That is why we eat properly only at meal-times, and not a full meal every time we feel hungry. That is also why we let the sex instinct get the better of the self-preservation instinct on such occasions as "women and children first" off a sinking

ship. That, too, is why in certain eras, like the Victorian age, people tried to shut out mention of sex anywhere except in the bedroom. It is also, of course, because we curb our instincts—and not always wisely—that the shameful state of half-education about sex matters exists to-day. The folly of such abnormal curbing—or, as the psychologists term it, repression—is equalled by the folly of the girl who starves herself in order to have what she considers to be a good figure. Repressions usually have their just rewards the girl who slims usually runs the very real risk of becoming a tubercular patient, and the girl who goes out into the world halfeducated about sex matters may well suffer both physically and mentally. In a way, birth control is a repression of the normal sex instinct. This, however, is a repression which has always been practised, for, after all, birth control in the way advocated in birth control clinics has the same effect of limiting the population as the animal way of "survival of the fittest." It is true that modern birth control does not carry out to the letter the laws of "survival of the fittest," but by its methods limited families are ensured. All the members of the smaller families, because they can have the same care and food as would be divided among so many more, have a good chance of being fit. Some repressions are necessary to conform to civilised life, such

as the example mentioned of eating at mealtimes.

We have said that the sex instinct comes second probably only to the self-preservation instinct. A feeling of hunger is a strong reminder given by a man's instinct for self-preservation, and a feeling of sexual desire calls in evidence his sexual instinct. Both need curbing to a certain extent, otherwise a person becomes a glutton or a sex-maniac. The one leads to hospital, the other to the police court, and eventually to the lunatic asylum.

The problem of love has been of much interest to psychologists. It had been thought that love and *lust* were opposing elements. Freud's teachings now tell us that there is no opposition between them, and that lust is a part of love. There is no love without some lust and without some other emotions, all of which together make up love.

It is certain that the amount of sexual feeling in all of us varies at different times, but it is not so certain how the influence of sex on our everyday life varies. For not only do our own sex instincts and those of our immediate neighbours affect us, but the sex instincts of people we have never seen alters our lives. Many people who wield great power lead lives that are sexually abnormal, when judged by the sex lives of the majority,

and we know that the abnormalities of leaders and we know that the abnormanues of leaders may well have indirect results which may plunge the whole world into war. It was not until psychology was properly studied as a science that people began to realise the vital part sex played in our everyday life. Research workers in psychology found that there was another question almost as important as the question of what rôle sex plays in our life. The other question is: "How do the conditions of our life affect our sex instinct if at ditions of our life affect our sex instinct, if at all?" We know that a starving man, no matter how much he may also want sexual satisfaction, attends to his stomach first. But what of a mother? If a mother is starving, not only her feeling of duty, but her innermost instinct, will make her give food to her children before herself; and it has been said that the maternal instinct is part of the sex instinct. If a couple are really very much in love with one another, their feeling for one another can stand any amount of buffeting by the winds of misfortune. Such a wife or husband will "stick to the other through thick or thin," but where the sexual make-up of one or both parties is not of this kind, the slightest change in the fortunes of either may cause the couple to drift apart.

When a couple are making love, they imagine that nothing else occupies their minds except sexual thoughts. They feel these thoughts all powerful. How many millions

of men with real worries during the day-time forget these worries in the company of women in the evening! But even though everything else may seem to be forgotten in the rapture of sex excitement, and the couple feel themselves oblivious to their surroundings and to other people, it only needs a knock on the door or a ring of a telephone-bell to bring them back very quickly to an appreciation of their real surroundings. Some ask: "If sex is a dominating factor in our mental make-up, why do we have so often to be so strongly stimulated to sexual activity?" The answer is that the stimulation is necessary to remove obstacles which have obtruded themselves in the way of such activity, for instance, worries of everyday life.

People discuss the part that sex plays in the lives of those who are impotent from birth. Surely they, at least, are free from its dominance! No, that cannot be. They were born as a result of sex, and their relationship towards other people is governed in part by the minds of the other people, so that indirectly sex must affect them.

We know that people are differently influenced by their sex instincts. Some are passionate, others are said to be "cold." Some are homosexual or Lesbian, whereas others, though they are not homosexual, are misogynists or woman-haters. One writer has advanced a very ingenious theory which

deals in one fell swoop with all these people. This is the theory of bisexuality, which states that we are all born with a certain amount of sex feeling for both sexes. In the normal individual the sex feeling for the opposite sex dominates, but the sex feeling for the same sex does not altogether disappear. It is easy to understand that such a state of affairs can exist in the mind, since it so obviously exists in the body. All men have nipples, which, after all, are female secondary sex organs. All women have a clitoris—a small penis. Normal people are those who have friends of their own sex and of the opposite sex, but desire more complete contact only with certain individuals of the opposite sex. abnormal people, the delicate balance of feeling for their own and the opposite sex is disturbed either because they were born that way, or because external circumstances have brought about that state.

Enough has been written to show that sex is an inborn instinct in most people, but that it, like the other instincts, is moulded by all the other factors of our existence. Civilisation is a great factor of our life, and part of our civilisation is an economic situation which is so arranged to make the surroundings in which one set of people live totally different from the surroundings of another set. The influence of the economic situation on the sex part of certain girls' minds shows itself

so clearly in the minds of prostitutes. Those girls who are prostitutes because that is the only way in which they can find enough to eat (see chapter on Prostitution) have brought their sex instinct to the aid of their self-preservation instinct. In doing so, they often so abuse the sex instinct as to let it be entirely dominated by the self-preservation instinct. Sex means nothing to them but a way of earning money. Disgustingly enough, many "respectably married" wives are like that. The husband provides the home, and in return—"Well, if the brute wants possess my body, I suppose it is his right." Even in the case of prostitutes and the woman who has married as a kind of life insurance, something may remain of the strong sex feeling. Some circumstance may suddenly awaken a real sexual desire and a mind in which the sex element has seemed to play a small part, although the body was occupied with sexual matters, reawakens to a knowledge of the presence of real sex instincts.

While there is a constant conflict going on in our minds, we find it impossible to work properly or to enjoy our lives. Such conflicts occur in the minds of people who are sexually unsatisfied, or who have to exert themselves sexually more than they are able. The sex element of the mind, by its bad "working," disturbs the mind as a whole, and we find that as a rule the people whose lives run in

a smooth, happy way towards success, lead satisfactory sex lives. People with abnormal sex lives can, of course, also achieve "success" in life, but of what value to them is their success if they do not take real pleasure in their own lives?

Psychology is a science still in its infancy. It has, however, already taught us a great deal about the faults people commit and so ruin their lives. In its way it has already done something to make some people very happy. It is freeing us of so many of the repressions we had thought necessary, which, however, we now see were only encumbrances for us. It is psychology as a science that is very largely responsible for the movement of sex education, a movement for which this book is written as a contribution.

The layman will find many books available to introduce him to this so fascinating science, among the best of which are Freud's collected works and articles, and the works of Havelock Ellis and William McDougall. The head librarian of any large lending library will be able to supply a list of works on Psychology. This science is a comparatively new one, and one must remember the old adage that "a little knowledge is a dangerous thing."

CHAPTER IV

THE SEX ACT

THE normal sex act, and the "play" that leads up to it, is the method of starting a new life cycle throughout the higher animal world. Sexual intercourse or copulation is the act whereby the spermatozoa of the male are placed by the male in such a position as to be able to attain the egg of the female. In the human, this position is usually fairly high up in the vagina of the woman.

The sex act in human beings—and in that they differ from most lower animals—usually follows on some feeling of affection which is given only to someone chosen after a shorter

or longer period (see Psychology).

In this chapter, only the normal sex act will be discussed, in its various forms, and none of the abnormal variations which exist.

The sex "play" should always precede normal intercourse. Other writers have described in full, with "beautiful" analogies, the resemblance between the sex "play" in human beings, and that in peacocks and peahens, kingfishers and queenfishers, and

even earthworms, which are in any case hermaphrodite. Suffice it to say that not only is the sex "play" normal and usual, but on the skill with which it is performed depends the pleasure and, as a result, often the health of the couple. Both the man and the woman have a part in the "play." Far too many women just lie still, letting the husband proceed as he wishes, meanwhile feeling terribly self-satisfied at performing their marital duties. Just as in the whole of married life both the man and the woman should play a real part in sustaining the affection between them, so in every individual sex act both should play real part. That part should never be played too strenuously. Tiredness after the sex act is normal. A feeling of being worn out is abnormal and unhealthy.

The beginning of the sex "play" is usually verbal. The man and woman talk endearingly to one another, and during this stage, as during the whole "play," the expression on the face and in the eyes should have an important rôle. Touch is the next sense employed. In both man and woman there are parts of the body which are especially sensitive, and stroking of which forms a powerful stimulant to sexual desires. These parts are known as erotogenic zones. In the woman they are the neck, the back of ears, the armpits, around the elbow-joint, the breasts, inside the legs, the large and small

lips of the vulva, the clitoris, and finally the vagina. In the man, too, the erotogenic zones are of importance, though usually a man in good health does not need nearly so much stimulation as a woman to bring him to the point where he can satisfy his desires, providing he is really attracted. In the man, the zones are the back of the ears, the neck, the inside of the legs, the scrotum and penis. These zones react according to the stimulation they receive. It is usual to progress from a less sensitive zone to a more sensitive one. The final result of the "play" is, of course, the actual sex act; that is the ejaculation of semen from the penis in the vagina. The ideal is that the man should ejaculate just when the woman has her orgasm, and that he should have introduced his penis just when the woman most desired it. To this end, somewhat skilful co-operation is required, and intercourse really satisfactory for both is not arrived at till after many occasions. Thousands are the women who have need of medical and psychological treatment solely because they have never been satisfied by their husbands, and hundreds. too, are the women who have been tired out within the very first few months of marriage. This is not very surprising when it is realised that (perhaps partly because of the upbringing in our civilisation) the inexperienced man has to ejaculate after very short "play," but the inexperienced woman needs long stimulation. The more experienced the man, the longer "foreplay" he needs; while, as a whole, the more experienced the woman, the less "foreplay" she needs.

A newly-married couple should, therefore, not be too disappointed if they find that within the first few months after marriage they, or at least the woman, have been unable to obtain the full satisfaction and pleasure expected. There is real harmony only when ejaculation and the woman's orgasm take place at the same time, and to arrive at this harmony may take time, patience and understanding.

On no account should the man introduce his penis into the vagina until the woman is ready to receive it. It is easy to tell when the vagina is in a suitable state, for then the walls have become very slippery and mucous fluid is secreted. It is advisable for the man to wait till the woman is nearing her orgasm before ejaculating. He can tell when the orgasm starts by the convulsive movements the woman undergoes. Where difficulty is experienced in doing this, indications are strongly against introducing the penis directly the woman is ready. Manual manipulation of the vulva and vagina, and especially of the clitoris, must be carried on to ensure the woman being in a high state of excitement.

Where necessary, to prevent the man ejaculating too soon, he should concentrate more fully on exciting the woman and thus be less conscious of his own reactions. thus be less conscious of his own reactions. If the penis has been inserted and the man feels he must ejaculate, he should on no account withdraw, but he should not press too hard against the woman. If he has ejaculated and the woman has not had her orgasm, then he must on no account withdraw until he has brought on the orgasm by manual manipulation of the clitoris. It is a nervous catastrophe of the first order for a woman to be left unsatisfied, *i.e.*, without having had an orgasm, while the man, completely satisfied, turns over and goes to sleep. It is, moreover, the prime reason underlying much of the discord that may exist between a man and woman. The woman feels cheated, and rightly so. On the other hand, it is equally bad for the man if the woman insists on having intercourse several times during the night. In the actual sex act the mental attraction between the couple, strong as it may be, and important part though it may attraction between the couple, strong as it may be, and important part though it may have had in the "foreplay," becomes entirely secondary to the physical attraction. For this reason, perhaps it might be appropriate here to mention that a marriage obviously has a better chance of being successful if both partners keep themselves in perfect health. In fact, it is the duty of married people to

keep in as good health as possible, and to that end all excesses of any sort, especially sexual and alcoholic, must be avoided.

No one member of a couple, if he or she feels that the full benefit of intercourse is not being obtained, should refrain from telling the other and thus "nurse a grievance." Adjustments can always be made, but only successfully if both the man and woman know what the other wants. Where a couple find it impossible by themselves to satisfy one another and cannot, without further advice, adjust themselves, in their sex life, they should not despair. Very often it is quite a small matter arising out of ignorance and inexperience. A doctor can often solve the problem, and, failing him, a specialist in sexology, whom the doctor can recommend, will very likely be of great help.

Positions for Intercourse

A couple will usually find out for themselves the position which best suits them. In such an individualistic act as sexual intercourse it is impossible to standardise methods of action. In spite of this, we know that there are definite vogues or fashions in the practice of intercourse. Positions most generally used to-day were never used a hundred years ago, and even to-day, positions used in England differ from those in foreign countries.

The most common positions used in England to-day are:—

- 1. The woman lies on her back. The man lies facing her, supporting his weight on his outstretched arms by the side of her body or head. The woman opens her legs, and, according to the distance the legs are opened and the amount the knees are bent, will be the ability of the man to introduce his penis. If the penis can only be introduced a short way, as when the legs are almost closed, it rubs along the clitoris and stimulates it. If the legs are wide open and the knees drawn well up, the penis should be able to penetrate right into the vagina, but will stimulate the vaginal wall much more than the clitoris. For really deep penetration, the woman's buttocks should be supported by a cushion.
- 2. This is the position that is most advised if the woman is a virgin. At the first intercourse the woman's hymen, which already has an opening of varying size, is further perforated. It is essential, in order to save as much pain and bleeding as possible, that the hole already in the hymen should be stretched as much as possible, rather than that the hymen be torn from the vaginal wall by sheer force. In order to avoid this, the penis should meet the hymen at an acute angle so that it stretches

the wall gradually. If the penis meets the hymen at a right angle, it is directed in the worst possible direction and will cause much damage. Apart from the physical effect, the mental effect on the woman of a very painful first intercourse may be very bad. The position is that of the woman lying on her back ACROSS the bed. Her feet rest on the floor, the edge of the bed supports the upper part of her buttocks. Thus her outer genital organs are quite clear of the bed. The man stands between the woman's open legs, and inserts his penis very gradually, being careful not to force if the woman experiences much pain. If the woman is not high enough, she can be supported on cushions. The higher the pelvis, the easier the insertion of the penis, providing the woman lies flat on her back.

3. This position is also a good one where the woman is a virgin. The man sits on a chair with his legs together. The woman sits on his lap. She can lower herself on to the man's penis, which penetrates into the vagina, and thus can stop penetration as soon as the position is painful. Penetration will be deeper if the man later stands up, supporting the weight of the woman by crossing his hands beneath her buttocks. The woman clasps the man by crossing her legs behind his knees.

- 4. The Side to Side Position.—There are several variations of this position, where the couple lie on the bed facing one another. The variation that allows, perhaps, the most freedom of movement is that in which the man has his thighs between the woman's thighs, supporting his weight on the woman's lower thigh. There should be some cushions behind the woman's back. This position leaves the hands completely free for manual manipulation.
- 5. In this position, which is ideal for when the man is tired, the man lies on his back and the woman lies above him, supporting her weight on her hands.

From these positions described, a couple will be able to derive other positions. The sex act should never become an habitual routine. Every time the man must "court" his wife; in other words, the "foreplay" should be thorough every time. It should vary. Imagination should be allowed to play a part. The various positions should be tried, and no one position used too often in succession. The æsthetic side should be considered. Tact should be used about the method of contraception, should one be employed. To avoid staining the bed, a towel can be placed over the sheet. Both the man and woman should be clean. The sex organs

of both should be washed thoroughly at least once a day. Genital cleanliness is, unfortunately, rare in England. On the Continent, many women wash the vulva with soap and water at least two or three times a day, or after they pass water. The sense of smell plays as important a part in many people as the sense of touch, and such a small thing as bad breath can wreck the whole of a couple's sex life.

There are many don'ts to be observed. If either party is ill, unless he or she really wants to, don't have intercourse. While the pregnant woman can safely indulge in intercourse during the first few months of pregnancy, intercourse becomes dangerous, and even very dangerous, at the time when the periods would be expected were there no pregnancy. Intercourse should not be indulged in after the seventh month of pregnancy, nor till about eight weeks after the birth of the child. It is dangerous for the woman.

When the woman is losing blood from the vagina, be it menstrual or for any other reason, intercourse is most inadvisable.

Intercourse may be painful for the woman. The causes of this pain are many and varied, but whatever the cause may be, to continue to try to have intercourse in the face of the pain, except in those very rare cases when a doctor may recommend such a procedure, is

sure to lead to a break in the harmony between the couple.

One of the commonest causes of pain in the woman is probably a malposition of the womb. Such a malposition can usually be cured easily by medical or surgical treatment. The author has seen a woman who had

been married for three years and who had never had proper intercourse. The reason was that the husband had hurt her so much the first time he tried to break her hymen that she felt all intercourse must be painful. In actual fact, the patient had an exceptionally strong hymen, but it only needed a very minor operation by a surgeon to break it. It took the patient several months to overcome the fear she had of intercourse, but then she was able to enter into a full and happy sex life. She would have spared herself and her husband much anguish had she consulted a doctor sooner. It must, however, be realised that the sex life of a couple is eventually what they themselves make of it, and the doctor's work is only to help where there are difficulties, or to advise as to how to avoid these difficulties

CHAPTER V

PREGNANCY AND LABOUR

(See Figs. 8, 10 and 11)

IF after intercourse one of the spermatozoa ejaculated by the man meets an egg in one of the tubes (see Anatomy and Physiology) and fertilises it, that egg can, and may, be deposited in the inner wall of the uterus. So far, we do not yet know what chance a fertilised egg has of being implanted, and when implanted, what chance it has of surviving the "term" and growing into a viable child. A viable child is one that can live for more than a week after birth. Experts are still somewhat vague in their estimates as to the length of time a child has to be in the womb to reach "term," but it seems to be, on an average, about 270 days—that is just under 39 weeks, and just about nine calendar months. When trying to foretell the date of an expected child's birth, it is usual to reckon nine calendar months and seven days from the first day of the last period the woman had before becoming pregnant. This method of estimation can, however, only be used with any success in women who are regular in their periods, and in women whose last period has been normal in character, since it is not unusual for a pregnant woman to lose some blood for two or three days at the time she might expect her first period were she not pregnant. There are even rare cases of women who menstruate practically normally when they are pregnant, and yet have perfectly normal children.

Limits of Viability

The period in which the child develops in the womb is known as the "period of gestation." The shortest period of gestation on record after which a viable child was born is 230 days; the longest, 330 days.

The egg is implanted in the thick uterine wall (see Fig. 7) nine or ten days after it has been fertilised. This implantation usually takes place in the upper part of the uterus on the front and back wall.

Among the first events happening to the egg after it has been implanted are the formation of "membranes" around itself. From a part of these membranes, as well as from a part of the tissue of the wall of the uterus, is formed the "placenta." The membranes are commonly known as the "bag of waters," and the placenta and membranes together as the "afterbirth." As the egg grows, bloodvessels form in the placenta, and these blood-vessels derive nourishment from the

blood of the mother flowing in the wall of the uterus. The blood circulation of the mother is never actually connected with the circulation of the egg, though the nourishing substances in the mother's blood work their way into the blood of the placenta and into the circulation of the child. In this chapter the developing egg will be termed throughout as the embryo, though it is usually known after the third month as the fætus. embryo grows to fill the cavity of the womb. It lies in it, surrounded by its membranes and separated from these membranes by the fluid in which it is floating (see Fig. 10). The membranes and the fluid they contain really form a protection for the embryo, and save it from sudden jolts and jars—much in the same way as a good straw packing saves a delicate ornament packed in a box.

The whole womb grows, together with the growth of the embryo. This organ, which at the beginning of the pregnancy is the size of a small pear (see Anatomy), increases till it is larger than a full-sized Rugby football. Its blood supply also increases enormously. The changes that have to take place are best appreciated when it is remembered that in nine months the embryo develops from something about the size of a pinprick to a child about twenty inches long. At first the embryo grows slowly—at the end of three weeks it is still only a twentieth of an inch long; at the

end of six weeks it is half-an-inch long, but has already a little heart, small lungs, and the beginning of its eyes. By the end of the third month it is four inches long and is quite easily recognisable as a future baby. It has little bones in its limbs, all its organs have started forming properly, ears, eyes and mouth are quite obvious, and the sex organs are quite distinguishable. The sixth month shows an embryo ten inches long and weighing over a pound. It is in the last three months that the embryo is most concerned with increasing in size and weight. The average new-born baby weighs about seven pounds and is one foot eight inches long.

All these changes just described have very definite effects on the mother. One hears, only too often, people saying "Oh, pregnancy and childbirth is a quite normal thing!" Perhaps it is—for some women. For peasant women living in the country and working the land, pregnancy is a not very disturbing event, and in some countries labour and childbirth means an unfortunate interruption of an hour or two in the day's work. The most amazing childbirth the author recollects having witnessed was in Egypt. When walking behind a young woman of "full belly" he noticed her bend over, pick up a stone, grope among her long-flowing robe, and pull out the baby to which she had just given birth. She then cut the cord with the stone, tied it

into a knot, and walked on, with the baby over her arm. Civilisation has done something to the modern town-living woman to make pregnancy and labour events that cannot be looked on with the same complacency as shown by the country-dwelling cousin or even the town-living mother of a hundred years ago. For a town-dwelling woman to-day, only too often everything is not normal. This statement is not made with the idea of frightening women away from having children. On the contrary, it is made with the idea of letting the reader know beforehand that there may be something wrong with a woman practically as soon as she becomes pregnant, but that that abnormality can easily be put right by the correct treatment. It stands to reason that the conditions of to-day, such as hard work typing in an ill-ventilated office all day, with very little exercise in the evening or at the week-end, will render the body unfit for any extra strain put on it. Pregnancy is a strain on any woman. Profound changes go on in both the physical and mental states of the woman. A healthy body is well prepared to meet the strain, but someone "run-down" or who does not take enough care of herself may well have a bad time. The maternal death-rate in childbirth is still much, much too high. Many of the women die solely because they have neglected ante-natal care. Any and every woman, as soon as she suspects or knows she is pregnant, should visit her doctor or an ante-natal clinic. By biological tests known as the Ascheim-Zondek and the Friedmann tests it is possible to tell a woman for certain if she is pregnant or not by the end of the eighth week of her pregnancy. By the same tests, which as far as the woman is concerned, involve nothing more than collecting a sample of her urine, it is possible to tell whether she has had an abortion or miscarriage (see Abortion). The organs that give way most easily under the strain of pregnancy are, apparently, the kidnevs, and because of this, every pregnant woman should have her urine examined every month for the first six months, and every fortnight for the remaining three months, to make sure that she has no albumin in her urine. It is not the purpose of this book to instruct in pre-natal care—there are already enough books written on that subject, most of which deal competently with it. The purpose of this chapter is to tell the pregnant woman that she *must* instruct herself. Her doctor or the ante-natal clinic will willingly give details of sources from where instruction in full can be obtained. Follow the advice of the medical adviser. Grandmothers, aunts, midwives, housekeepers, landladies and charwomen are always only too willing to tell the young expectant mother what she is to do. Their advice is well meant but dangerous. It is rarely up to date, and usually applies to every kind of case except the one in question. There is no need for a woman to be frightened, especially if in the first months she finds that she is vomiting and not feeling too well. By the second half of the pregnancy she will probably be feeling very happy and self-satisfied. The father, too, must realise that the mother will be undergoing mental changes which may make her behaviour towards him rather strange. It is then that patience and care must be exercised, and extra allowances made on both sides.

When "term" approaches, the question always arises as to whether to have the child at home, in a nursing home, or at the hospital. The doctor should always have the last word in this decision, though suggestions can certainly be made by the mother. However, the mother should never try to be cleverer than the doctor, and if the doctor orders a midwife (a race whose popularity is, unfortunately, in foreign countries, at any rate, on the decline) the patient should listen just as carefully to her instructions. So often do we hear women who have had bad accidents in their pregnancy or labour say "Well, I told the doctor!" or "Well, I told the midwife!" They were so busy telling people, that they had no time to listen to what they were being told. At the completion of "term," normally, labour starts, and the woman bears her child.

Labour takes place in three stages:—

- 1. The period of pain, which may last anything from a few hours to a few days, and during which the woman can usually walk about in the room.
- 2. The period of expulsion of the child, which normally lasts from a few minutes to two hours.
- 3. The period of expulsion of the afterbirth, lasting normally from ten minutes to an hour or less.

At first, the pains are usually not very strong and not very close to one another (some women with their first baby, which starts to move at four and a half months, think they are starting pains, but soon realise that the sensation which has so surprised them is not painful at all). The pains last a few seconds, to pass off for an hour or so. However, they gradually become more severe and occur at much shorter intervals, till just before the period of expulsion is about to start, the pains may be lasting two minutes and occurring every five minutes.

The pains of the period of expulsion are only felt when the neck of the uterus (see Anatomy) has become dilated sufficiently to let the head of the child pass. Then pains of a different character are felt. The woman has a need to "press down." It is at this stage that it is most important that the woman

does exactly what she is told, for it is only by following the advice of people who are competent that she can make the actual delivery as easy as possible.

There are no pains in the delivery of the

afterbirth, in the normal way.

Pregnancy and labour may not always be an entirely normal occurrence when a woman is not healthy, but with proper and good advice well followed, practically every woman can have a perfectly normal, healthy baby with no harm to herself.

People say and write a great deal about the duty of having a child. The duty is as nothing compared with the satisfaction of having children. No doctor ever sees a happier patient than the woman who has just borne a healthy, living baby.

CHAPTER VI

CONTRACEPTION

By contraception is meant the avoidance of pregnancy. This can, of course, be achieved by complete avoidance of any sexual intercourse, but as we have seen (see Psychology), for any married couple, or even any couple who see a great deal of each other, the nervous effects of such avoidance can be very grave.

The same nervous effects have been attributed to the method of contraception most commonly in practice, "Coitus interruptus." Here, however, it is the woman who suffers most; and even her suffering, which is said to be due to her being unable to have her orgasm because the man has withdrawn his penis before ejaculation, can be lessened. The woman's orgasm (see Sex Act) can nearly always be brought on by further manual manipulation of the clitoris.

"Coitus interruptus" is the form of contraception which relies on the fact that the man withdraws his penis just before he ejaculates. Whatever the nervous effects may be, it is a thoroughly bad method of contraception, in that it affords small protection for three reasons:—

1. At any time after the man has his erection he may lose a small quantity of seminal fluid which just oozes away without the man being aware of it at all.

2. Withdrawal in time before the ejaculation depends on the man's self-control, which varies according to his health and accord-

ing to his tiredness.

3. Seminal fluid spilled on the vulva (see Anatomy), or even on the thighs of the woman, has a chance of making her pregnant.

From all points of view, this method is one that should *never* be practised.

The "Safe Period"

Two doctors, Knauss and Ogino, have ingeniously applied the knowledge we have of the menstrual cycle (see Physiology) and of the length of life of spermatozoa to the problems of contraception. They say that as ovulation in the woman takes place between the twelfth and sixteenth days after menstruation starts, and as spermatozoa live only a few days (and also the female egg lives only a few hours), there must be certain days in the month when it is impossible for a spermatozoon to meet the live egg. They have indicated in the following diagram (which can only be understood if the chapter on

Physiology is well understood) what days in the month they think a woman must be sterile:—

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

1

Impossibility of conception as spermatozoa cannot live till ovulation.

Possible pre- Definite impossibility of conception sence of egg. as there is no egg.

Sperm introduced may meet live egg. Possible to conceive.

We can see that in theory it is perfectly "safe" to have intercourse on any of the first eight days after the commencement of menstrual flow, and on any of the eleven days preceding the next period. In theory, it is only possible for a woman to become pregnant if intercourse takes place between the eighth and seventeenth days after the start of menstruation. No one will deny the fact that the chance of pregnancy after intercourse between the eighth and seventeenth days is at its greatest.

Fortunately or unfortunately, however, the rest of the theory does not hold good. It is not science that is at fault. It is that the interpreters of Drs. Knauss and Ogino have read more into the discoveries of science than is really there. There is a further factor in the argument, and that is known as the "relative fertility" of the woman. If a

woman has a high fertility, she has a chance of conceiving almost any time during the month, except during actual menstruation. If she has a low fertility, she will conform perfectly to the theories of Knauss and Ogino. Fertility definitely varies not only from woman to woman, but in the same woman at different times of the year. The explanation for this variation in fertility can be due to facts which we had not considered in the chapter on Physiology, and which the interpreters of Knauss and Ogino do not consider. These facts are: that many, and some authorities say, most, women are irregular in their periods; that it is possible in some way that we do not, as yet, understand very well for a woman to ovulate more than once in a month without there being more than one menstrual flow in that month; and that the egg can possibly be fertilised anywhere in the tubes or in the womb, or even in the peritoneal cavity, and not just half-way along a tube, as is considered usual. It is also possible that both the egg and the spermatozoon, under specially favourable conditions—and in a woman of "high fertility," conditions are specially favourable—can live longer than experimenters have shown them to live.

The author considers that there is a "Safe Period," but that "safe" can only be taken to mean "absolutely safe" during menstruation. Of course, copulation during men-

struation is abnormal and unhealthy. The "safety" diminishes a little more each day further away from the first day of menstruation—either before or after that day. Copulation is therefore still relatively safe in the four days before menstruation is expected, but only in a woman with regular menstrual flow. As a method of contraception, the "Safe Period" has something to recommend itself in a woman of low fertility; little, if anything, in a woman of high fertility.

The other methods of contraception are all of doing something active, and not as in the above-described methods, really "hoping for the best." By doing something active is meant interposing a barrier between the spermatozoa and the egg, or else preventing the implantation of the egg in the womb.

The Condom, Sheath or French Letter is

The Condom, Sheath or French Letter is certainly to-day the best method of contraception. It is the easiest, the safest, and not by any means the most unæsthetic method.

Condoms can be bought in most chemist shops throughout England, and are usually, or ought to be, within the reach of every purse. There are two firms in England which between them produce 15,000,000 condoms a year, which they could sell at a wholesale price of certainly less than a penny each. (There should, therefore, be no reason why condoms of the best quality could not be sold to the public at a maximum price of three-

pence or fourpence each, were the business, though it is perfectly legal, not carried on in such a semi-secret sort of way.) It must be clearly understood that the fault of these exorbitant prices lies in no way with the shops supplying the goods, but with the conditions necessitating these shops incurring such high expenses before they are able to market their goods. These conditions depend on nothing but the narrow-mindedness of the general lay public.

The best condom to buy is one made of thin but strong rubber, and shaped to form a teat at the end. This teat holds the discharged seminal fluid and lessens the chance of the condom slipping off on withdrawal, or of

the condom bursting.

The strongest precautions should be taken to ensure that the rubber is not rotten, and before use, every condom should be blown up to make sure that there are no small holes through which seminal fluid can leak. Condoms should be kept covered by talc powder, which prevents the rubber rotting. As an extra precaution the inside and outside of the tip of the condom can be smeared with a contraceptive jelly which contains lactic acid—a spermicide.

The advantages, then, of the condom method are its ease of use, its sureness, since one can always control whether a condom leaks or not, its possibility of combining with any and every other method of contraception, the fact that it is not too unæsthetic, and also the fact that it helps in safeguarding against the spread of venereal disease (see Venereal Disease).

The disadvantages of the method that make it impractical for the very sensitive, and for those men with very poor seminal flow are: A diminution of pleasure for both the man and the woman. Some authorities state (wrongly, probably) that the seminal fluid contains substances which are absorbed by the walls of the vagina and have a good effect on the health of the woman.

A condom definitely lowers the sensitiveness of the nervous reactions which bring about ejaculation. Thus a man with poor seminal flow will take a long time before he ejaculates, or he may not ejaculate at all.

The condom is used by the man. All the following methods are dependent on the woman's skill:—

Caps (Dutch and other kinds)—known also as "check pessaries."

The Dutch cap is made of rubber in the form of a half sphere or crucible, and is attached to a rigid ring. This ring should fit accurately around the neck of the uterus in the cul-de-sacs of the vagina. Thus the entrance to the neck of the uterus is closed. See Fig. 9 (see Anatomy).

The other type of rubber pessary fits somewhat lower down on the neck of the uterus.

It a Dutch cap or a rubber pessary is used, it is wise to douche the vagina soon after intercourse. The pessary should not be removed till twelve hours after intercourse.

Dutch caps made of metal instead of rubber are in use, but are dangerous as well as being

practically totally ineffective.

The advantages of the "check pessary" method are first and foremost æsthetic. The pessary can be put on hours before intercourse, and is removed again hours after intercourse. During intercourse it is hardly noticed by either the man or the woman.

The method, however, is not so reliable as the condom method. The cap has to be very closely fitting to prevent any spermatozoa passing. To this end, several sizes of cap are manufactured, and the woman must be sure that she has chosen the right size and fitted it correctly.

The "Gold Pin" method is dangerous and ineffective.

The "Grafenburg Ring" is a method of contraception widely in use, The "ring" consists of a spiral coil of some non-corrosive metal, which is introduced into the canal of the neck of the uterus. This method in no way prevents the meeting of the spermatozoa and the egg; rather it favours this meeting as it holds the canal of the neck open. The

"ring" prevents the implantation of the fertilised egg, on account of the fact that its mere presence in the neck of the uterus is sufficient to cause an inflammation of the uterus and render the wall tissue unsuitable for the implantation (see Physiology). It is a fairly effective method, but is not 100 per cent. certain. Furthermore, it is a method in which the woman runs a very definite risk from the infection that accompanies the inflammation of the uterine wall, as well as the risk of extra-uterine pregnancy.

Lactic Acid Jellies.—The principle on which these preparations are expected to work is very good. It is that the acid kills the spermatozoa. But the results are very poor. The jellies are excellent for use as additional precautions with the condom or the Dutch cap. There are hundreds of preparations on the market to choose from, and none can really be recommended above any other.

Quinine Pessaries and Jellies.—These are somewhat more successful than the Lactic Acid preparations.

In conclusion, it will be seen that the moral and religious arguments for and against contraception have not been mentioned. It has been taken for granted that those who are in doubt about the "right" of using contraceptives will go and listen to the arguments of those who say that contraception is

"wrong." They will satisfy themselves as to the logic of the arguments they hear, and then if they wish to hear the arguments "for" contraception, they will be able to do so from practically every second person in the country; and they can also read books on contraception, of which those by Dr. Marie Stopes and Dr. G. Courtenay Beale are the best known.

For those who wish to use a method of contraception, the condom—combined with one other method (such as the "safe period" or a quinine pessary)—may be taken to be almost 100 per cent. certain.

The Dutch cap, together with a pessary (such as a foam pessary—but not a solid pessary, which may displace the cap), is next

in order of certainty.

The "Grafenburg Ring" has met with a certain amount of success, but is dangerous to the woman and to any children she may wish to have later.

The same applies to all kinds of "sterilets" as to the "Grafenburg ring."

Metal caps are unsuccessful and highly

dangerous.

The "Safe Period" is successful for varying periods of time in various women, but is most unreliable.

"Douching" is a most unsatisfactory and unreliable method of contraception in this country.

Lactic Acid jellies have not yet reached a high-enough standard of efficiency to be recommended for use alone, but together with a condom form a very good combination.

Patented Substances and Chemicals.—To these a law may be applied as to all patent medicines (except those recommended by the bulk of the medical profession): "Never use any patented preparation that has been on the market less than ten years, and even then, don't be too sure about it."

For further information about contraception, the reader is referred to the many works on the subject, a full catalogue of which can be obtained from the publishers of this book. There are few doctors in the country who will not advise on contraception, and the venereal disease and the ante-natal clinics in practically every hospital can give further advice. There are official birth-control clinics in various parts of the country which specialise in advising on contraception.

People are still shy to-day of asking advice on such a matter. They find usually, though, that they speak more freely about it to a complete stranger than to a friend or acquaintance of long standing. Therefore, if you are shy of going to your own doctor, go to a completely strange doctor during his consultation hours and speak to him about your problem.

CHAPTER VII

ABORTION

In different countries, different terms are used for the death of the embryo and its expulsion from the womb at different times during pregnancy. Here, for the sake of simplicity, the term abortion shall be used to indicate the death of the embryo and its expulsion from the womb at *any* time during pregnancy.

Abortion is either unintentional or inten-

Unintentional Abortion

Some specialists hold that of every five eggs that are fertilised and implanted in the uterine wall, at least four are aborted. Their estimates are not really scientific, but still, it seems absolutely certain that a large proportion of embryos are aborted unintentionally. As will be seen in the chapter on Sterility, there are thousands of cases in which a woman wishing to have a child becomes pregnant, but repeatedly aborts before the child is viable (see Pregnancy). There are many possible reasons for these unintentional abortions. Most of these are due to illnesses or deficiencies

of various sorts which can fortunately be remedied by medical or surgical treatment. For instance, a provoker of unintentional abortion is syphilis. Hospitals are constantly dealing with syphilitic women who, after being pregnant for a few months, suddenly show the signs of an impending abortion and soon afterwards do abort. The signs of imminent abortion (where the abortion is sometimes still preventable) are vague pains and cramps, especially in the lower part of the abdomen, accompanied by the loss of brownish coloured blood. Syphilitic women are inclined to abort the first embryo in the first few months of the pregnancy, to keep the next embryo somewhat longer, the third still longer, and so on, what longer, the tillid still longer, and so on, till eventually, after several pregnancies, a mis-shapen, unhealthy child is born. If a syphilitic woman, however, is properly treated (see Venereal Disease) there is no reason at all why she should not give birth to a healthy child, even if her syphilitic condition is only discovered after her pregnancy has already started.

Kidney diseases, diabetes, and any of the acute infectious diseases like scarlet fever, will predispose a woman to have abortions, as will all local inflammations. Various poisonings like those induced by chronic alcoholism or drug-taking also have their effects. Further, shocks of any sort should definitely be minimised during pregnancy, as should taking

part in any activities such as violent exercises which may result in injuries. In this connection, no definite rules can be laid down. In a hospital not so long ago, the irony that can be attached to abortion was only too well demonstrated. In neighbouring beds there were two women, one a perfectly healthy, strong woman and happily married, who longingly wished for a baby; the other, a poor street-girl who was pregnant with what she termed "an unknown man's unwanted child." Although there was absolutely nothing organically wrong with the first woman, and in spite of the constant supervision of doctors and the strict avoidance of anything likely to upset her, she regularly aborted in the third month. She was even willing to spend the whole time of her pregnancy in bed, but all to no avail. The second woman tried all she could to rid herself of her child. Massage, exercises, vaginal washouts, and even people standing on her abdomen. At last, in desperation, she threw herself out of a fourth floor window. Both her legs were badly broken and she suffered other injuries, but a few months later she gave birth to a very strong child. She had absolutely no use or wish for the baby, so it was put in an orphanage. These cases were, of course, two extreme ones, but the average woman of to-day needs to take very proper care of herself during the whole of her pregnancy (see Pregnancy). In the treatment of unintentional abortion, doctors have a new weapon nowadays, and that is the use of glandular preparations. A certain number of unintentional abortions result from insufficiencies in the working of the various sex glands (see Physiology), or else from the fact that the uterus has never developed properly. The use of glandular injections has worked wonders in preserving the pregnancy, even when the signs of imminent abortion have shown themselves, and there are few women to-day who abort habitually who need despair; as the science progresses, so will the chances of carrying pregnancy to "term."

Intentional Abortion

There are no definite statistics to show the number of intentional abortions—legal and illegal—that are carried out yearly in England. In France, in the year 1936 there were over one and a half million illegal abortions of which the police eventually heard. The police only hear of an abortion when something goes wrong! In Switzerland, which is a country with a population of four and a half million—that is, just a little more than half the population of London—there were, in 1935, over 100,000 known abortions. In the town of Geneva alone in one year (population 140,000) there were over 5,000 abortions, which would mean

that one in every fifteen women had one abortion in that year (after which, some accident needing medical attention occurred, or which was performed on, or followed by, medical advice). To estimate the number of abortions performed last year in England in the region of one hundred thousand is probably to be very, very well on the conservative side. What a tremendous figure this is, is appreciated if one remembers that the population numbers less than eighteen million women of child-bearing age. About one in every hundred and eighty women have an abortion yearly, though it must be remembered that there are women who have several abortions in one year-one patient had nineteen in as many months. Still, the fact remains that throughout the year, day in and day out (counting the nights as well), every hour at least ten illegal abortions are performed.

The layman may say either that such a statement is a gross exaggeration, or that abortion is not a dangerous procedure at all. The answer is: "Certainly, not every woman who undergoes abortion falls ill afterwards. But many do. Many even die. The majority are merely 'run-down,' depressed, and generally unable to do their work properly." If the methods of abortion in use are studied, it is easy to understand why so much suffering ensues. There is one, and

only one, safe way of inducing an abortion with a minimum of danger. That is the method used by doctors working in hospitals. There, abortions are done because continued pregnancy constitutes a real danger to the life of the mother, and indications for such abortions are usually fairly definite. They include serious heart disease, kidney disease and terrible vomiting, and logically, in most cases, abortion is accompanied by sterilisation. The procedure involves having the patient under a complete general anæsthetic, using a whole series of instruments (known as dilators and curettes), ensuring the most aseptic conditions possible, and keeping the patient in bed under proper care for at least five days. The actual operation performed in this way requires a certain amount of skill and experience, but even if the doctor finds that all is not going as it should, he has every necessity on hand to put matters right. Now doctors are not people who fuss and bother unnecessarily, and hospitals are not places where patients are kept longer than absolutely necessary. It is absolutely essential for the safety of a patient that any intentional abortion be done by a doctor, or at least in the way and with all the care used in hospitals.

We see that legal abortions are performed in one way only, but what of illegal abortions? There are hundreds of different ways advocated, and as a rule, the more likely they are to be effective, the more dangerous they are to the patient. In the chapters on Anatomy, Physiology and Pregnancy are descriptions of how the egg is fertilised and where it is implanted in the uterus. The idea in abortion is to uproot the egg from its position and expel it. The dangers of abortion lie in doing damage while attempting to uproot the egg, introducing germs into the womb or elsewhere, poisoning the patient or leaving behind pieces of dead embryo which become ideal breeding grounds for germs. Everything from prayers to hat-pins are pressed into service to abort. By mouth, patients drink "medicines," "teas," purgatives, absinthe, ergot and quinine, to mention a few concoctions. "Medicines" and "teas," one supposes, work by "suggestion." Absinthe, ergot and quinine work by poisoning the mother. As a rule, Nature will not allow a child to go to "term" in a womb that is thoroughly diseased. The quantities of absinthe or quinine a woman has to drink to stimulate the womb to contract and expel the embryo are not much short of the fatal dose. In all cases, the woman who has had the embryo are not much short of the fatal dose. In all cases, the woman who has had an abortion by the use of these substances runs the risk of killing herself by poison. Purgatives work by inducing such strong diarrhœa that all the organs near the bowels start reacting. Here, again, the dose necessary to produce an abortion approximates the fatal dose. Other methods of abortion are more logical, perhaps, and aim at affecting the womb, and sometimes the egg directly. Injections of various substances into the vagina are given, the womb is massaged from outside and via the vagina. More enthusiastic abortionists actually make injections into the womb itself, but a good knowledge of anatomy and some knowledge of surgery is necessary to pass an instrument into the very narrow canal of the neck of the uterus. At the Old Bailey in 1936, a particularly brutal and tragic case was heard, in which two elderly women had injected concentrated lysol into the uterus of some poor girl who had gone to them to be aborted. Three guineas were paid to these barbaric hags to practise an operation which resulted in the immediate death from shock of the girl. The far-sighted judge, in his wisdom, saw fit to punish these abhorrent murderers with just one year's imprisonment. The smallness of the sentence was justified by the ignorance of the malefactors.

A doctor, on the other hand, who not so many years ago did an abortion on a woman who needed it, and who suffered no ill-effects, was sentenced to three years' penal servitude and struck off the medical register because he could not prove to everyone's satisfaction that the operation had been necessary. It was his education that was responsible for his

high sentence. There is a certain amount of justice in the reasoning that a slip on the part of an educated person is as bad as a crime on the part of an ignoramus. But, so long as this justice prevails, we must expect disastrous abortions to be practised by people who know they have little to lose.

The Bourne trial (see below) marked a

welcome step forward.

The method of dilation and curettage used in hospitals involves dilating the neck of the uterus (see Anatomy) till it is wide enough to admit the curette, a sharp scratching instrument. With the curette, the walls of the uterus are systematically scratched till all traces of the embryo, placenta and membranes are removed. The nearer a method of abortion approaches to this method, the more dangerous it is in unskilled hands. Piercing the canal of the neck of the uterus is "surgery." It is only too easy to force a way in without properly dilating the opening. Such an action is almost bound to result in peritonitis. At every step the unskilled abortionist runs the risk of killing his patient.

The Bourne Trial

On July 18th and July 19th, 1938, there took place at the Central Criminal Court (the Old Bailey) a trial which did more to draw the attention of the public to intentional abortion than did most of the preceding trials

where the charge to all intensive purposes had been the same.

Mr. A. W. Bourne, an obstetric surgeon, whom the judge, Mr. Justice Macnaghten, described as "a man of the highest skill," openly, at one of our great hospitals, performed an operation to terminate pregnancy in a girl of fourteen years of age. This girl had been raped several weeks previous to the operation, and the men who had raped her had been sentenced to imprisonment. In Mr. Bourne's opinion, his action in terminating pregnancy was correct "in the performance of his duty as a medical man, as one of a profession devoted to the alleviation of human suffering."

The case was a perfect one to obtain a ruling as to how the law concerning abortion is to work. It did not, as so many people think, alter the law in any way. It did, however, very definitely make it much clearer than it had been.

The Law of Abortion then stood, and to-day still stands, as it was passed in 1861, as follows:—

THE LAW OF ABORTION.

THE Act of 1861 relating to offences against the person contains the following references to abortion:—

Victoriæ Reginæ, Cap C.

[&]quot;An Act to consolidate and amend the Statute

Law of England and Ireland, relating to Offences against the Person, 6th August, 1861. Sections 58 and 59.

ATTEMPTS TO PROCURE ABORTION.

- "58. Every Woman, being with Child, who, with intent to procure her own Miscarriage, shall unlawfully administer to herself any Poison or other Means whatsoever with the like Intent, and whosoever, with Intent to procure the Miscarriage of any Woman, whether she be or be not with Child, shall unlawfully administer to her or cause to be taken by her any Poison or other noxious Thing, or shall unlawfully use any Instrument or other Means whatsoever with the like Intent, shall be guilty of Felony, and being convicted thereof shall be liable, at the Discretion of the Court, to be kept in Penal Servitude for Life or for any term not less than Three Years, or to be imprisoned for any Term not exceeding Two Years, with or without Hard Labour, and with or without Solitary Confinement.
- "59. Whosoever shall unlawfully supply or procure any Poison or other noxious Thing, or any Instrument or Thing whatsoever, knowing the same is intended to be unlawfully used or employed with Intent to procure the Miscarriage of any Woman, whether she be or be not with Child, shall be guilty of a Misdemeanour, and being convicted thereof shall be liable, at the Discretion of the Court, to be kept in Penal Servitude for the Term of Three Years, or to be imprisoned for any Term not exceeding Two Years, with or without Hard Labour."

Mr. Bourne was charged under Section 58 of using an instrument with intent to procure

a miscarriage.

As it happened, in the first reading of the charge the word "unlawfully" was left out. Mr. Bourne freely admitted that he had used an instrument—in point of fact, several instruments—but he said that his use of these instruments was perfectly lawful. He supported his claim by quoting a legal rule that it was lawful to procure the miscarriage of a woman who would surely die or whose life would be very definitely shortened by the birth of a baby at "term."

Now nobody would have said in the case of the girl of fourteen, on whom Mr. Bourne operated, that she would certainly have died as a result of giving birth to a baby at "term." However, there were specialists who testified that giving birth to a child would have been a terrible nervous strain for such a girl. In other words, to put it very shortly, her health would have been badly affected. The judge, in his summing up, made it very clear how different this type of case was from the usual type of case concerning criminal intentional abortion. He summed up the discussion about the health of the girl in these words: "Life depends on health, and it may be that, if health is gravely impaired, death results." The jury acquitted Mr. Bourne, and thus it became quite clear for

the first time that the law about abortion was that it was legal for a doctor capable of judging whether the health of his patient would be badly affected by continued pregnancy, to terminate that pregnancy when he saw fit.

At the moment, vigorous attempts are being made to formulate and introduce into the House of Commons a new Bill concerning abortion.

CHAPTER VIII

VENEREAL DISEASES

THE main part of this chapter will deal with two illnesses, Syphilis (Lues or Pox) and Gonorrhæa (Clap), which are spread chiefly by sexual intercourse.

There are many other minor and major affections spread as a result of sexual contact. Of the minor ones, the most common among the less wealthy classes result from being presented with "bugs" of any sort, from lice and fleas, to what are commonly known as "crabs." Of the major ones, the most serious is that known as "Soft Chancre," the effects of which can be just as serious as of a mild syphilis, and which starts in a similar way, except that the original sore is soft instead of hard and appears earlier. The treatment of the minor affections is largely a matter of hygiene, but where the presence of such an affection is known to exist, it is always safest to visit a doctor to make sure that nothing more grave accompanies the condition. the major affections need medical treatment.

Syphilis is a contagious disease, in a similar way that measles, scarlet fever, chickenpox,

trench fever, and even psittacosis, are contagious diseases. From the doctor's point of view, there is absolutely no more shame in a person suffering from syphilis than from any other of the diseases just enumerated, but there is just as much shame if the disease is not shown to a medical practitioner and a treatment not followed in the prescribed way. For all the diseases are contagious diseases, and people suffering from them are a danger to the other people with whom they come in contact.

Whereas measles, scarlet fever and chickenpox are caught by infection, as a rule, through the nose or mouth (respiratory organs), syphilis is usually caught by infection through the genital organs. There is a very slight possibility of catching the disease from a pipe or a drinking glass used by a syphilitic patient, or from a lavatory seat. How slight this possibility is, is nicely illustrated by this story. The present author was assisting at a clinic in venereal diseases, when a man with early syphilitic symptoms came in. The professor in charge of the clinic, when he had made the diagnosis of syphilis, not out of curiosity, but to prevent further contagion, asked the patient: "Where did you catch this?" The answer was: "I must have got it in a public lavatory." "Damn funny place to take a woman!" was the professor's comment. The syphilis germ lives only a few minutes when

it is not in contact with human blood. The only "innocent" syphilis that occurs at all commonly is in doctors and nurses who handle

syphilitic patients or newborn babies.

The syphilis germ, which is otherwise called "Spirochaete," is present in the seminal fluid (see Physiology) of syphilitic men, and in the vaginal fluids of syphilitic women. It is also present in very large quantities in the fluid in the various syphilitic sores that can occur all over the body. It can be seen very well under the microscope as a quick-moving spiral rod about one ten-thousandth of an inch long. A syphilitic patient has hundreds of millions of these germs.

How Syphilis Shows Itself and the Progress of the Disease

We have seen that syphilis is usually caught by sexual infection, and so the sites where syphilis first shows itself are usually the genital organs. Like all other infectious diseases, syphilis needs some time to develop in the system before it shows any real effect, and this period of time, known as the "period of incubation." is usually about twenty-eight days, and probably never less than ten days, though it may sometimes be as long as three months. Then the first sign that appears—in the man on the penis, and in the woman on the vulva or inside the vagina (or even on the neck of the uterus, where it cannot be

seen or felt)—is a small red spot, this usually about four weeks after sexual intercourse. This spot enlarges into a sore which gets bigger for about three weeks, and from which fluid oozes out on scratching. This fluid is teeming with spirochaetes, and contact with the fluid by any part of the body where the skin is thin, such as lips, nipples and genital organs, or anywhere where there is a wound or abrasion, means sure infection. If the sore is left alone, it will disappear in about two months—and the patient naïvely thinks he has rid himself of the infection. Not at all; it is the first stage which has passed, and the spirochaetes are working in the body towards the second stage. These spirochaetes are carried by the bloodstream to every part of the body; and it is towards the end of the first stage that, by the examination of the blood known as the "Wassermann test," a doctor can tell whether his patient has for certain got the syphilis germ spreading throughout his body. This test is very valuable, for, throughout the whole time the patient is syphilitic, it remains positive, and as soon as it has become negative and staved negative for some time, the doctor knows that the patient is cured. Also, many cases where the first and second stages do not show so definitively as they are here described, would never have been diagnosed as syphilis were it not for the Wassermann test.

Any time between two months and eight months after the original infection, the second stage shows itself. The patient feels "rundown" and he has "sore throats," but the most characteristic and worst of all the symptoms are the unpleasant skin diseases and sores which accompany this stage. Again, if untreated, this stage may clear by itself, and the body is prepared for the worst and most dangerous third and final stage. This stage may continue straight on from the second stage, or may only appear years later. When the author started studying medicine, he was told by a doctor: "Half of the fatal conditions you will have to deal with are due to the third stage of syphilis. The third stage of untreated syphilis gives a variety of illnesses, from general paralysis of the insane and insanity, from which the patient suffers for years, to a syphilitic heart attack, from which the patient dies in a few seconds."

The doctor, who was an old practitioner, was talking from his experience. Fortunately to-day the outlook is not nearly so bad. Some years ago, the great chemist Ehrlich, after hundreds of experiments, discovered his cure for syphilis known as "606" (six-o-six) or Salvarsan. Since then, a new preparation. "914" or neo-Salvarsan, which, like "606," is an arsenic compound is more generally used. To-day, by injections of "914" and other treatment, almost any kind of syphilis

can be arrested at the stage it has reached, all the spirochaetes can be killed, and a great deal of recovery can be brought about. Treatment started before the signs of the first stage show can stop the disease ever showing any appearance at all; started in the first stage, can surely stop the second stage appearing, in the second stage will cut short all symptoms and probably arrest the development of

the third stage.

But—the treatment is a fairly long treatment, and it is more than useless if it is not followed out exactly as prescribed by the doctor. Syphilis can certainly be cured, but only with the goodwill of the patient. patient who will not submit to treatment is a criminal, because the effects of the disease are not only terrible for himself, but for all those to whom he gives the disease. He gives it to his wife even though she may show no signs till the third stage. He gives it to his children as "Hereditary Syphilis," which seems to be a quite different disease, but is caused by the same germ. The author remembers seeing, on the same day, two young children suffering from different heart illnesses, both of an hereditary nature. Struck by the coincidence of the fact that both children had the same surname, he asked the mothers whether they were related. mothers did not even know one another. Later in the day the author mentioned the

cases to another doctor, and happened to mention the name, too. The doctor's reply was: "Funny thing—I did a post-mortem examination on an old man of ninety to-day. His name was the same, and, remarkably enough, he lived to that old age although he suffered from an untreated syphilis." Upon further enquiry, it was established that the two children were really great-cousins, and the old man was their great-grandfather. Though neither the children's parents nor grandparents knew they suffered from syphilis, the fourth generation showed very marked—and, in one of the cases, fatal—signs of the illness.

It is true that there are few English doctors to-day, however, who assert that syphilis, except very, very rarely, does cause such

symptoms so much later.

The cure for syphilis is available for every-body who requires it. Practically every hospital in the country has a venereal disease clinic in which patients are successfully treated. Every doctor can treat syphilis. **But**—the patient must have patience and the will to attend for treatment every time the doctor considers it necessary.

Better still than the cure is prevention. Irregular intercourse should be avoided. All intercourse outside marriage is irregular; and the girl who is willing to have intercourse with various men occasionally for pleasure is

as big a danger to herself and her men as is the regular prostitute. If such intercourse is indulged in, a condom or French letter (see Contraception) should be used by the man, as it does afford some very small protection. Apart from that, the sex organs should be carefully washed with some mild disinfectant, such as soap and water containing permanganate of potassium. Circumcised men are said to be less liable to syphilis than the uncircumcised.

One of the biggest dangers in the way of a syphilitic is the charlatan. In medicine, always beware of the non-registered practitioner. He is sometimes right, but very,

very rarely.

It is instructive, though frightening, to know that in England there are about a half-million people suffering, or who have suffered, from syphilis, and about another million and a half who have gonorrhæa. That means—to reduce these figures to the commonplace—that in every full Underground carriage in London there is almost certain to be one person who either is suffering, has suffered or will suffer from syphilis, and three from gonorrhæa. Syphilis could disappear altogether within one generation if only it were possible to prevent syphilitics having intercourse with non-contaminated individuals, and if medical abortion could be practised on all syphilitic pregnant women. It might even

disappear if intercourse were prohibited except between syphilitics, and the pregnant syphilitic women were treated throughout their pregnancy with a suitable method of treatment. There is no doubt at all that a syphilitic pregnant woman can be treated with "914" and other substances so that she can be cured of her syphilis and bring a perfectly normal baby into the world.

In certain countries, very strict measures are taken to prevent the spread of syphilis, and Denmark affords a very fine proof of the effectiveness of these measures. Syphilis is entirely absent from the civil population of Denmark. The only people there who suffer from the disease are sailors who have caught it in foreign ports. These sailors are examined as soon as they return to Denmark, and every effort is made to prevent them infecting anyone else.

Gonorrhæa, which is caused by a germ called gonococcus (a small, round, non-moving microbe, usually found under the microscope in pairs), is, unlike syphilis, rarely a generalised disease. It is a local disease affecting usually only the genital organs and the urinary organs (see Anatomy). Gonorrhæa is a disease about three times as common as syphilis, easier to catch, less serious in its effects, but more difficult to treat.

Appearances in the Man

There is a very short period of incubation. After from two to six days, the man notices an abundant flow of pus from the canal of his penis. This is the acute stage of the illness. The penis becomes sore, a burning sensation may be felt, passing water becomes painful, and the desire to pass water becomes much more frequent. After some time, the illness becomes *chronic*, the soreness and flow of pus lessens except for occasional drops, and here again, as in syphilis, the patient imagines he is cured. But those few drops of pus which still remain contain thousands and thousands of the gonococcus germ. Men and women in the chronic stage of gonorrhœa are the people who transmit this illness. At first the illness appears light enough, especially in the man, but the distant effects can be very serious. The most frequent later complications in the man are inflammations of the testicles and the bladder. followed by scarring and shutting up of the central canal of the penis, making it terribly difficult, and sometimes even impossible, to pass water. At least two-thirds of urinary disease are due to an old gonorrhœa.

Appearances in the Woman

In the woman, the disease is even more serious than in the man, because as the genital organs are so much deeper situated, it is much harder to treat the illness and kill the

germ.

Within a short time (a few days) after infection the vulva becomes inflamed and pus flows, especially from the openings of the various glands of the vulva and vagina. Occasionally it is the neck of the uterus which is first infected, and the woman notices at first nothing but a flow of white fluid. As the illness passes from the acute to the chronic stage, it advances up the uterus to the tubes, where it causes inflammations; and it also works its way into the bladder. These inflammations can be very painful.

In gonorrhæa, the chances of a cure are much greater if treatment is started within the first week after infection. "As soon as anything abnormal is noticed after intercourse—consult a doctor," is a rule that everyone should be taught.

Sterility is an almost invariable result in both sexes of an untreated gonorrhea. It is rare, but eventually the illness may generalise itself, then causing bad bone deformations.

Gonorrhæa, like syphilis, can be cured. There are opportunities available in every district for treatment. In every telephone book can be found the address of the nearest hospital, and every hospital can give advice about treating these illnesses. No one need have an uncured syphilis or gonorrhæa.

CHAPTER IX

PROSTITUTION

PROSTITUTION has often been spoken of as "the oldest profession," and in fact mention is already made of it in the earliest chapters of the Bible, in the story of how Judah, one of the sons of the Patriarch Jacob, took his own daughter-in-law, who was heavily veiled, for a harlot. In spite of its age, the profession has never, except in ancient Greece, gained any dignity, but because of the length of its existence it may have become looked on as a necessary evil. That it is an evil is indisputable—that it is necessary or even useful has formed a basis for discussion.

The reasons for a woman becoming a prostitute are: that she finds no other way of feeding or clothing herself, that she requires a large amount of sexual stimulation and finds no other way of satisfying herself, or that having been brought up in that circle, she knows no better. Thus economic conditions are responsible for a variation in the number of prostitutes; where it is difficult to find work, there always being a greater number of women who take up the profession. As in

any other trade, however, the supply varies with the demand, and it is because of this that there is always a far larger number of prostitutes in large cities than in rural districts.

The type of woman who requires a large amount of sexual excitement, and therefore turns prostitute, is usually a woman of low intelligence, who at a young age had become the mistress of one or more men. Later, as much as anything because her mind thinks in no other terms than that of sex, she becomes more promiscuous, and finally an ordinary prostitute.

Though it is not rare for the daughters of a prostitute to turn prostitutes through having been brought up in contact with that circle of people, it must be stated that in a great number of cases prostitutes realise the misery of their position and arrange for their children to live elsewhere in healthier mental surroundings, expending a great deal of care that the children's upbringing will be as good as possible. There are many cases of women who have been deserted by the fathers of their children and have become prostitutes solely to have enough money to educate the children.

The most unfortunate type of girl is the one who has never seen a family life in which anything but misery and strife prevailed, who has, perhaps, been bullied by her father or

mother or both, and has also seen her mother misused by her father. In desperation, she runs away from home as soon as she thinks she will be able to support herself, which is often at the ridiculously early age of fifteen or sixteen. She may even at that age have been turned out of the house. She soon finds that, without recourse to the street, it is quite

impossible to feed and clothe herself.

In the trade of prostitute, as in most other trades, there are all levels of "workers" and many types of organisations and combines. Then, let us admit it, as the supply caters, after all, for all strata of society—from the very highest in the land to the very lowest—there are similarly all types of girls occupied. The great tragedy, however, if the matter can be looked at from a professional point of view, is that whereas in most occupations there is a reasonable chance of working one's way up the ladder of success, as a prostitute a girl is almost bound to sink only lower and lower.

In most countries of the world, except England and her Colonies, and the United States of America, the system of licensed houses or brothels exists. In theory, these houses are kept to a certain standard by State enforcement, and the girls are regularly examined by a doctor. There are many critics of the English administrators, who about eighty years ago abolished licensed houses

in England. These critics say that as a result there are many more street walkers who can in no way be controlled and who constitute a far greater danger to themselves and to the public. Later in this chapter an answer is given to those critics, when it is seen how the problem has been tackled in Soviet Russia.

Periodically the more sensational of the English Sunday newspapers publish articles revealing how certain men termed "pimps" live on the earnings of women, and how it is unsafe for the average decent English girl to walk in certain parts of certain towns for fear of being seized by "pimps" or their agents and being forced to become prostitutes. There are "pimps" in the world. They undoubtedly have strong organisations. Many of the men best known to the police are in control of up to a hundred girls, but not in England. Nor have more than a handful of girls been seized forcefully in England since the war and forced to become prostitutes. The English woman is far too independent to make a good prostitute for a "pimp," and in any case the police supervision is far too good. Strangely enough, too, even in other countries it hardly pays financially to live on girls' earnings. The cost of keeping the girls is fairly high, the rental of apartments is expensive, the bribery of the police, coupled with the competition of one's com-Periodically the more sensational of the

petitors (a more ruthless competition than in any other sphere), has crippled the "business."

As for the stories of girls being made to inhale an anæsthetic in a cinema, or being injected with a hypodermic needle as they are sitting on a bench in the park—they can be "debunked" at once. There is not a doctor on the medical register who would not pay good money to know of an anæsthetic which can be inhaled without the patient struggling, and of which just a few whiffs are sufficient to induce unconsciousness, but not a strong risk of death. Even in the willing subject in a weakened state, all the usual anæsthetics such as ether, chloroform and ethyl chloride induce a stage of struggling, and even those anæsthetics could scarcely be given on a handkerchief. As for injections, anyone who has ever given one knows that it is not nearly as simple as it looks, and that the needle has a nasty habit of not going through the skin unless the patient keeps still.

But to return to the study of prostitution and its effects. There are thousands of prostitutes in England, and there will be till strong measures are taken. Their evil effects are very real. Physically, they are responsible for the spread of over nine-tenths of the venereal disease treated in clinics and hospitals. Mentally, without dispute they are a

strong influence in the degeneration of the morals and thoughts of thousands of men. Of the inmates of one of our biggest prisons, nearly all the men, when at liberty, frequented prostitutes. Prostitutes are a strong temptation to married men who are temporarily away from home, and they have been the cause of disease and rupture in countless families that would otherwise have been

happy.

In spite of all that, the author dares to say they are a necessity to many men. Many prostitutes, with all the troubles they have had to suffer, have good hearts for other people and are sympathetic listeners. They have saved many a man from suicide by being the only person to whom he dare unfold his troubles, and from craziness, by being an outlet for his over-repressed sexual feelings. That they are a necessity is a sad reflection on the sexual upbringing and arrangements of modern society.

What can be done to lessen effectively the evil of prostitution? For the answer we can turn thankfully to Soviet Russia. None of the measures that have been put into force so successfully depend necessarily on Communism or Socialism as a political factor.

A full research was made into the state of prostitution immediately before and after the Revolution. In pre-war Russia the licensed house system flourished. There was State

supervision and medical attention. Arrangements were in force for a fortnightly medical examination of every girl in a brothel. The results of the enquiry proved that in spite of all this, one-third of the licensed prostitutes suffered from syphilis, the worst of all venereal disease, and of the other two-thirds, all but a few suffered from some sexual disease. This is the answer to those who support licensed houses and compulsory medical examination. Bribery naturally had been rife, but apart from that, it was very difficult to detect early syphilis without the willing co-operation of the patient.

The free prostitute is more willing to consult a doctor, and it was found that a lower percentage, but still a frightening number of street-walkers, had syphilis.

Of men suffering from syphilis, about sixty per cent. had caught it in licensed brothels, about thirty per cent. from street prostitutes, and only ten per cent. from other women.

The provision of work and the abolition of unemployment, together with a wider instruction in sexual knowledge to all Russian men and women, were the greatest steps in decreasing the evil (see Psychology).

Of course, all licensed houses were abolished, as was the special card all prostitutes in Tsarist Russia had had. Clinics were opened to which people could go when they thought

they had some disease, and their illnesses were treated in complete confidence.

And lastly, institutes known as "Prophylactoria" were opened to which prostitutes suffering from disease, or even those who were not, could go to be re-educated for a useful life. The average stay in a prophylactorium (which was by no means a charity institution, as every girl had to work) was two years. The day was spent in work, in education just like that of any school, and in medical treatment. The girls were free to go out at certain hours of the day, where and with whom they wished, but not in the evening or at night. At one time there were over thirty prophylactoria lodging a few thousand girls, but now the number of prostitutes has so diminished that there are only a few prophylactoria still existing.

It was recognised that there were women who were inveterate prostitutes, and for them nothing has and—probably nothing short of complete imprisonment (which would be irrational)—can be done. They are allowed to practise their trade as best they can, but their number is very small. They are all that remain in Russia of a "necessary evil," and even on them psychological treatment has been tried.

It is a tragic fact that "women of pleasure" should themselves suffer so much misery; and though the very strongest measures

should be taken against prostitution, it is useless and cruel to take measures against individual prostitutes. Prostitution can be fought successfully without that, and let us

hope and work that it will be.

(For further information the reader is referred to the Parliamentary reports in Hansard of various discussions on prostitution; to one or two White Papers that have been issued by the Government; to the League of Nations' Reports on White Slave Traffic; to Prof. V. Bronner's "La Lutte Contre La Prostitution en U.S.S.R."; to reports issued by the French, German, and South American Governments; and for further information of the spread of venereal disease, to the chapter on Venereal Disease in this book.)

CHAPTER X

IMPOTENCE AND STERILITY

It often happens that a couple marry, desiring to have children sooner or later. Time goes on and the woman shows no signs of becoming pregnant, or else she occasionally misses a period, but then recommences in the following month.

Eventually a doctor is consulted—usually only after a whole series of other people have given their advice—and it then rests with the doctor to explain why it is that the woman has no children, and, if possible, recommend a treatment. Why is the woman sterile? . . . The fault (for sterility is a fault) lies either in the man, the woman, or both of them.

Where the fault lies with the man, it may be due to one of several causes, the most common probably being sterility due to gonorrhæa. Sterility does not imply impotence, though naturally impotence must be accompanied by sterility. A man is impotent if he is unable to have an ejaculation at all, but he is sterile, even though he may ejaculate, if the seminal fluid contains no live spermatozoa. Under the microscope it is very easy to see the live spermatozoa moving around. If, after several microscopic examin-

ations, no live spermatozoa are found in the fresh seminal fluid, the man is almost certainly sterile. Gonorrhœa is an illness which, if untreated, often prevents the spermatozoa reaching the canal of the penis, because the inflammation set up by gonorrhœa may close up the various canals, which later become mere scar tissue (see Physiology of Male Sex Organs and Anatomy).

Sterility in the man may also be due to testicles of an infantile type, or to testicles which are not situated in the scrotum, but higher up, and are said to be "undescended." Men vary in the age at which their testicles cease producing live sperm, but it is certain that, with injections of suitable glandular preparations, testicles which would otherwise have reached the "age limit" can still go on producing spermatozoa. It is therefore easy to see that if the doctor consulted as to the reason why a woman is not having children can find no obvious fault in the woman, he will look for the following faults in the man:—

Evidence of past gonorrhoea, evidence of immature or "undescended" testicles, or evidence of senile testicles. There are many other abnormalities to be found, most of which are amenable to treatment. These range from nervousness to tuberculosis of the testicles. In any case, none of the conditions can be cured merely by reading about them,

and the doctor is the *only* man who is really competent to deal with sterility. In practically every branch of the doctor's art, there is a charlatan to mimic him, but in few branches does the charlatan dupe the patient so thoroughly as does the seller of medicines that "will make a man of you."

In the chapters on Anatomy and Physiology, something was said about the structure and working of the various sex organs. In both the man and woman there are the "glands" which produce the germ or the future embryo—in man the testis producing the spermatozoa, in woman the ovary producing the eggs. These glands, working in conjunction with other glands in the body, such as the pituitary and thyroid glands, also produce substances known as "hormones," and the study of the action of these hormones is a fairly new science, known as "endocrinology." We already know that it is the presence of hormones circulating in our blood that gives us a feeling of sexual desire. The impotent man is a man who has an insufficiency of these hormones. He can often be made potent again by injection of extracts from glands of animals, which contain the necessary hormones.

A sterile woman, just like the man, can be sterile as a result of a fault or faults occurring anywhere in her genital system. The ovaries may be undeveloped or senile, and the tubes,

which are equivalent to the canals in the man, may be changed into scar tissue by gonorrhoa, preventing the egg reaching the uterus from the ovaries (but not always preventing the spermatozoa reaching the egg and fertilising it, so that it is implanted outside the womb—a very dangerous condition known as extra-uterine pregnancy). The womb itself may be infantile or the seat of some inflammation which prevents implantation of the egg. Sometimes the condition of the womb is such that implantation of the egg can take place, but after a few weeks it is aborted (see Abortion). The vagina, too, may be the seat of some defect.

Where the fault can be attributed to both the man and woman, sometimes, paradoxically enough, neither of them have organically anything wrong. It appears that a woman of "high fertility" (see Contraception) can often have children of a man of "low fertility," who would be quite incapable of fertilising a woman of "low fertility." Similarly, a man of "high fertility," may fertilise a woman of "low fertility," who could not be fertilised by a man of "low fertility." The why and wherefore of these facts are not yet well understood, and they, perhaps, constitute a similar problem to that of the widower who has healthy children, who, marrying a widow with healthy children, can only produce unhealthy children.

There are, of course, the not-too-rare examples of couples who are sterile merely because the sex act is not performed in the correct way. Though there is a certain chance of a woman being fertilised if the spermatozoa are deposited low in the vagina and on the lips, the chance is much smaller than if the spermatozoa are deposited high in the vagina. Due to the systematic lack of sex education prevalent to-day, and even more prevalent some years back, it does happen that a couple who have never had sexual intercourse, and who did not know that sexual intercourse was necessary "to have a baby," have consulted doctors, asking the reason why they were sterile. Though this sounds unbelievable, it is, after all, only on a par with the lack of knowledge of millions of younger people who think that sexual intercourse will lead to pregnancy only if accompanied by "something" else.

We see that impotence and sterility are due to defects in the construction of the body, due to defects brought on by illness, or due to lack of knowledge. All these conditions can be remedied—but very few by the charlatan. Sterility is a condition that has caused misery in many homes, but if the science dealing with this subject goes on progressing at its present rate, there are good chances that sterility will become very rare indeed.

CHAPTER XI

CONCLUSION AND SUMMARY

Throughout this book, references have been given referring the reader from any one chapter to information given in the other chapters. It may seem almost as though no chapter has been completed, or can be by itself complete—and that is as it should be. For, after all, as was pointed out in the Foreword, each chapter "depends" on the other chapters. Further, no chapter has been written to be anything more than an introduction to the subject with which it deals. For instance, in the chapter on the Physiology of the Sex Organs, the working of these organs has been described in a very simple way, giving scarcely any detail. An attempt has, however, been made not to sacrifice too much information just for the sake of simplicity. So that if the first three chapters may be somewhat difficult reading for the layman who is quite unfamiliar with any natural science, the author hopes that the slowness with which they may have to be read will be compensated for in the added information that will be gained. The intro-

duction to the science of physiology is so brief, that little mention is made in the book of what may be called its daughter subjects. These are subjects which deal with just one section of the working of the organs; and two of these subjects are Endocrinology and Biochemistry. Endocrinology has been mentioned as the science dealing with extracts from the glands; as a result of the findings of some of its workers, many sterile people may be made perfectly normal. Biochemistry is the subject that deals with all the chemical changes that are continually going on in the body, and the man-in-the-street will probably be hearing a great deal more about this subject soon, because most of the modern cancer research work is being carried out along lines indicated by those biochemists who deal with the biochemistry of the sex glands. They have found something in their researches that may tell us what cancer is, and how to cure it.

While there are really no physiology books written expressly for the layman, there are several books on Pregnancy and Labour, or rather "Mothercraft," to which Chapter V is an introduction, and the expectant mother would do well to read one of these.

All around, intelligent people, and many more people who like to think themselves intelligent, are discussing Psychology. The Psychology of Sex is, of course, a subject

that covers an extremely large range of thought; some say that sex governs the whole of our lives, whereas those at the other end of the see-saw say that the only purpose of sex is to reproduce children, and that it only occupies our minds for a few moments of our lives at actual intercourse—and not always then! It would be impossible to enumerate even in a whole book the lists of subjects touched on in discussions on the problem of "what place has sex in our lives"—a problem still far from being solved—but the works of Freud and many other psychologists can be obtained at any public library.

Contraception has been explained in a concise way here. There are many books and pamphlets which deal at length with the subject; but it is not a subject that can be learned from writings. Nearly all the successful methods, except that of the sheath, need explaining personally by an expert. No one can be strongly enough warned to beware of the charlatan dealing in contraceptives. Too many of these people sell quite indiscriminately contraceptives which may be successful with some clients, but are entirely useless for others. The goods they sell are sometimes (but, fortunately, not usually in the better shops) expensive and worthless. Free information on birth control can be obtained from The National Association of Birth Control, 26, Eccleston Street, London,

S.W.1, who will give the address of the nearest clinic where personal advice may be obtained.

At the present day in England the chapter on Abortion may be taken as an interesting warning. It cannot be too strongly stressed that any method of abortion, except the medical one, is very, very dangerous. It is practically impossible for anyone who has not had a doctor's training in hospital routine and cleanliness in operative procedure to learn how to carry out an abortion in the correct way.

If someone has been foolish enough to undergo an abortion without consulting a doctor, it is not too late to consult one, for that is the only way to safeguard against that is the only way to sateguard against those effects of a badly-performed abortion which may only show much later. A doctor is not allowed by the General Medical Council or by the laws of the country to perform, aid or advise an abortion which is not medically necessary. It is a crime if he does any of these things. On the other hand, it is the doctor's duty, if a patient comes to him with a condition likely to endanger to him with a condition likely to endanger her life—and usually a woman after a very badly-performed abortion is in mortal danger -to treat that condition, and to make sure of saving the patient's life. Though abortion is undoubtedly a criminal act when performed by anyone except a doctor, and as such would lead to prosecution by the police, were the

deed discovered, no woman need fear that a doctor would inform the police—unless the patient dies. A doctor is not allowed to reveal anything to anyone that a patient has told him in confidence.

The chapter on Venereal Diseases has also been written as a warning to people—and especially to those who have a disease without suspecting that there is anything wrong.

The object of the book has, however, in no way been to frighten people. On the no way been to frighten people. On the contrary, its object has been to instruct, so that ignorance and the fear that is born of ignorance shall be lessened. The author does not desire that people should say that he has treated the subject in a "frank and open way." It would be a far greater compliment to hear that the book is a book of information, gives information without ever laying down the law on subjects that are controversial; that it shows which way modern thought is tending; and that it deals modern thought is tending; and that it deals concisely and simply with a subject about which the author hopes people will soon see no more sense in adding the tag "frank and open" than to a work on, say, "Engineering" or "Law as it affects the ordinary man." When the little dangerous knowledge which the public now has on sex matters becomes adequately supplemented in a rational way, we will have gone far in smoothing

away some of the worst difficulties of our lives.

When the public demands good education on sex matters, it will receive it, and the sooner that demand is made, the better for everyone. "The wise man will increase his learning . . . and the knowledge of wisdom will have its reward, and the expectation will not fail."

GLOSSARY OF TERMS AND NAMES

A

- ABORTION strictly means expulsion of the ovum before the child is viable, i.e., before the twenty-eighth week of pregnancy. After that time, expulsion of the child before the fortieth week is usually called MISCARRIAGE. For convenience in this book, any expulsion of a fertilised ovum before the fortieth week has been called abortion.
- ABSINTHE.—Generally prepared as a liqueur, in alcoholic solution. It contains the oil and another intensely bitter constituent of wormwood. Taken in large doses, it produces convulsions.
- Alcoholism.—The ill results of excessive use of alcoholic liquors. In mild cases, only drunkenness is found. In chronic cases, severe nervous and digestive disease is present.
- ANÆSTHETIC.—A substance that diminishes or stops sensibility to pain.
- Anatomy.—The study of the structure of organs or organic bodies.

B

"BAG OF WATERS."—The membranes enclosing the embryo and the fluid in which the embryo lies in the uterus.

BIOCHEMISTRY.—The chemistry of living tissues.

BIOLOGY.—The science of living things.

- "Bubo."—An inflammation of a gland in the groin following a venereal infection such as soft chancre, gonorrhœa or syphilis.
- "Bugs."—Parasitic organisms.

C

- Cell.—A granular mass of protoplasm which is capable of life and has a nucleus.
- CHANCRE.—The ulcer of the first stage of syphilis SOFT CHANCRE.—An ulcer caused by a venereal disease of which the infective germ is named Ducrey's Bacillus. Non-syphilitic, but very contagious.
- CIRCUMCISION.—The cutting away of the prepuce or foreskin of the penis.
- CLITORIS.—The organ in the female corresponding to the male penis. It contains erectile tissue (see Anatomy).
- Consciousness.—That state in which one knows of one's own existence, and is able to recognise sensations.
 - SUBCONSCIOUSNESS.—That state in which one cannot definitely recognise sensations.
- "CRABS."—The common name for Pediculus Pubis—a louse infecting the pubic regions.
- CURETTE.—A special spoon-shaped scraping instrument.

D

DIARRHŒA.—Excessive looseness of the bowels.

DILATOR.—An instrument which is used for stretching an opening.

E

EHRLICH.—A German-Jewish bacteriologist, who lived from 1854 to 1915 and discovered, among other substances, a special cure for syphilis.

EMBRYO.—An unborn child or animal.

EMBRYOLOGY.—The study of embryos.

ENDOCRINOLOGY.—The study of secretions of certain glands in the body—for instance, of the thyroid, pituitary and parathyroid glands.

ERGOT.—A fungus found growing on rye. It causes the contraction of certain types of muscles in the body, and in excessive doses is a very dangerous poison which may cause gangrene.

EROTOGENIC.—Stimulating to the sexual appetite.

F

FERTILISATION.—The act of making pregnant.

FŒTUS.—Embryo more than three months old (intrauterine age).

FOLLICLE.—A small cavity in the body containing, among other things, fluid.

GRAAFIAN FOLLICLE in the ovary.—One of the small follicles, each of which contains an ovum.

FREUD.—Sigmund Freud, who was born in 1856, is an Austrian-Jewish nerve specialist who founded a school of psycho-analysis. He has given out many original theories of psychology.

G

GENITAL.—Belonging to the organs of reproduction.

GLAND.—One of the organs in the body which either secrete substances necessary to the body, excrete substances dangerous to the body, act as filters to the blood, or secrete fluids of indirect use to the body.

GONORRHŒA.—A venereal disease.

GYNÆCOLOGY.—The study of diseases affecting only women.

H

Homosexuality.—A sexual perversion in which an individual has a sexual passion for one or more of his or her own sex.

HYMEN.—A membrane at the entrance to the vagina.

L

LESBIANISM.—Homosexuality as applied to women.

M

MEMBRANE.—A thin layer of tissue.

MENSTRUATION.—A periodic recurrent (monthly) discharge of blood and other substances from the genital canal of a woman, occurring during sexual life.

Mucus.—A thick, slimy fluid secreted by membrane. Mucous Tissue.—Tissue that makes mucus.

N

Nerves.—Cord-like structures in the body which can transmit certain impulses.

NUCLEUS.—A vital, usually central, part of a cell.

O

- OBSTETRICS.—That branch of medicine and surgery which is concerned with the care of the pregnant woman during her pregnancy, her labour, and the weeks following.
- Orgasm.—The culminating moments of intense excitement during the sex act.
- Ovary.—The glandular organs, where various cells are produced—the most important, the ova or eggs. In the ovary, very many substances which enter the bloodstream are also produced.

Ovum.—An egg.

OVULATION.—The ripening and discharge of the egg.

P

PARASITE.—An animal or vegetable which lives on another organism without giving anything in return.

PENIS.—The male sex organ.

Peritoneum.—The membrane lining the interior of the abdominal cavity and surrounding the organs in the abdominal cavity.

Physiology.—The study of the life processes.

PLACENTA.—The organ to which the embryo is attached and through which it obtains nourishment from the wall of the uterus.

PREPUCE.—The foreskin of the penis.

PROSTITUTION.—The hiring out of a woman by herself or others to men for sexual intercourse.

PSITTACOSIS.—An infectious disease transmitted from affected parrots to man.

PSYCHOLOGY.—The science having for its object the investigation of mind or consciousness.

PURGATIVES.—Substances which produce evacuation of the bowel.

Q

QUININE.—A bitter substance derived from certain kinds of bark. It is a very valuable medicine in certain conditions, such as malaria, but like so many medicines, it becomes a very dangerous poison when abused.

R

REPRESSION.—A keeping under or holding back.

S

SCROTUM.—The bag containing the testes.

SEMEN.—The fluid ejaculated from the penis, which contains spermatozoa and other substances (see chapter on Physiology).

- SEMINAL VESICLES.—Two small sacs at the base of the bladder, in which semen is said to be stored.
- Spermatozoa.—The male sex element capable of fertilising an ovum.
- Spirochaete.—The germ of syphilis (see chapter on Venereal Diseases).
- STERILISATION.—The act of making something or someone incapable of reproducing.
- Syphilis.—A venereal disease (see chapter on Venereal Diseases).

T

- TERM.—The date on which an embryo is expected to be born, i.e., 270 days after it has been conceived.
- TESTIS.—The gland in the male which produces spermatozoa and substances secreted into the blood.

U

URINARY.—Concerned with the secretion of urine. UTERUS.—The womb (see chapter on Anatomy).

V

- VAGINA.—The passage to the uterus from the external sex organs (see chapter on Anatomy).
- VIABLE.—Capable of living outside the womb.

W

WASSERMANN.—August Wassermann, 1860-1925, was a German bacteriologist who invented a test for syphilis.

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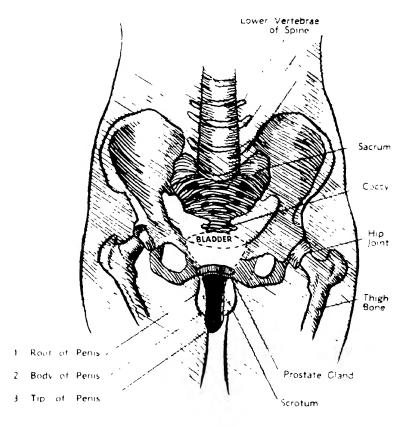
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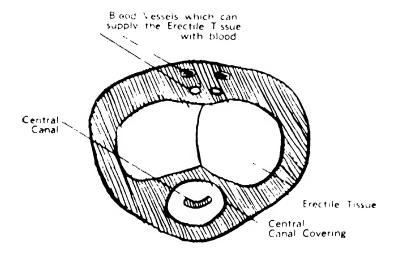


Fig. 1



The male sex organs shown in relationship with the bladder, spine, sacrum, pelvis and bones of the leg

Fig. 2



A diagram illustrating a slice through the body of the penis

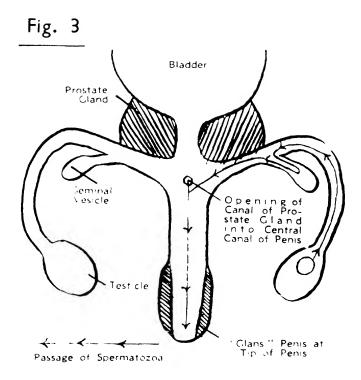
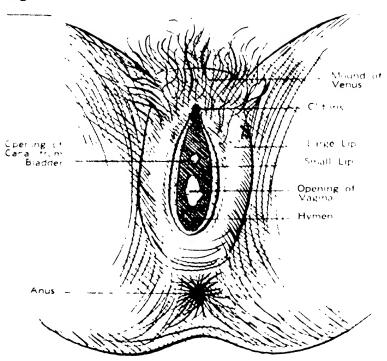


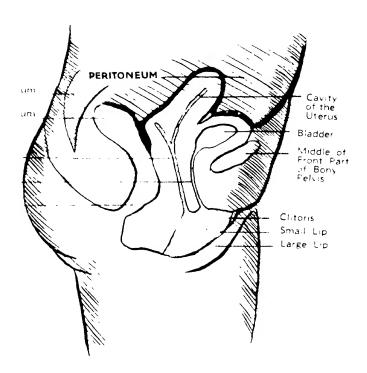
diagram showing the passage of the spermatozoa from the testicle to the tip of penis via the seminal vesicles

Fig. 4



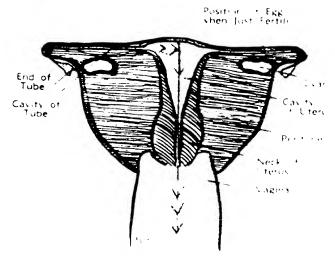
A diagram of the female external sex organs

Fig. 5



A diagram illustrating the left half of the female lower abdomen, as it would be seen if the body were sliced down the centre

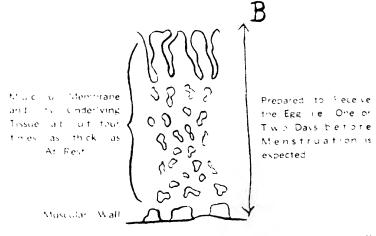
Fig. 6



A diagram it urtrating the vagina, womb, tubes, ovaries and peritoneum as they would appear if all were placed on the same plane. This diagram also illustrates (black line with arrows) the passage of an unfertilised egg from the ovary to the vaginal via the tube and uterus.



"At Rest" rellabout Tenth Day atte Period starts



A illustrates the thickness of the wall of the uterus " at rest."

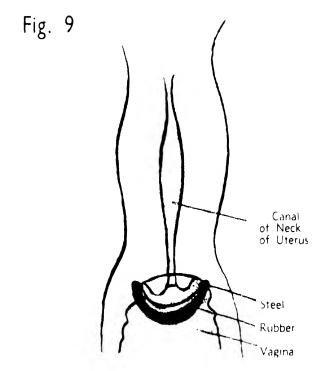
B illustrates the comparative thickness of the wall of the uterus just before menstruation. Both A and B are magnified several times.



Sx diagrams illustrating

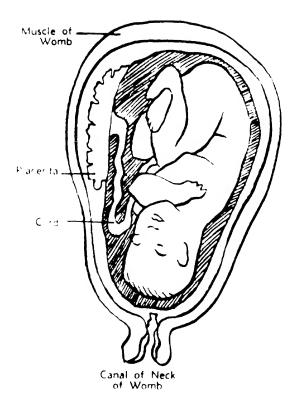
A spermatozoon magnified several thousand times

- 2. An egg magnified several hundred times
- 3, 4, 5, and 6, embryos of 8, 2%, 4% and 8% days



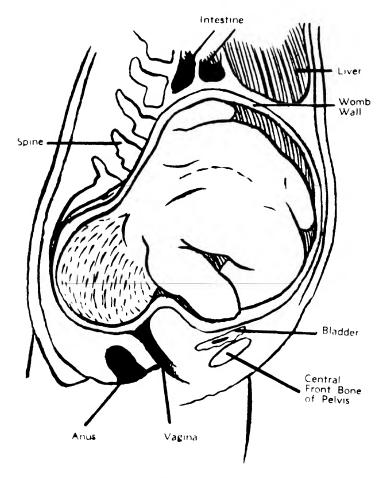
A diagram illustrating the correct position of the "Dutch Cap" at the upper end of the vagina, and how the cap prevents spermatozoa entering the canal of the neck of the womb

Fig. 10



This diagram illustrates the embryo of eight months situated in the "bag of waters" in the womb

Fig. 11



A diagram illustrating the position of a child in the womb at full term—just before labour begins